FIELD MAINTENANCE PRINT SET

TABLE OF CONTENTS

UNIT VARIATIONS COVERED BY THIS PRINT SET
KA750

Field Maintenance Print Set

MP01024

Digital Equipment Corporation

KA750

REV. B | SIZE B | CODE TC | NUMBER KA750-0-2

REVISIONS		
REV	B	
CHG. NO.	TW001	
DATE	5-7-84	

USED ON OPTION/MODEL

SHEET 1 OF 2

DRN.		DATE 9/17/80
CHK'D	L. Levin	DATE 9/17/80
PROJ. ENG.	L. Levin	DATE 9/17/80
FIELD SERV.	Alan Bellamy FW	DATE 9/17/80

digital

TITLE: KA750 PRINT SET

SIZE	CODE	NUMBER	REV.
B	TC	KA750-0-2	B

DIST.

DRB 124

BLANK

FIELD MAINTENANCE PRINT SET

TABLE OF CONTENTS

UNIT VARIATIONS COVERED BY THIS PRINT SET
KA750

Field Maintenance Print Set

MP01024

Digital Equipment Corporation

KA750

11750 CPU

REV. B
NUMBER KA750-0-2
CODE TC
SIZE B

REVISIONS	REV.	CHG. NO.	DATE

USED ON OPTION/MODEL

SHEET 2OF 2

DRB 124

DRN: PHL	DATE	
CH'D L. Levin	DATE	9-17-80
PROJ. ENG. L. Levin	DATE	9-17-80
FIELD SERV. Ken Bellamy	DATE	9/17/80

digital

TITLE: KA750 PRINT SET

SIZE	CODE	NUMBER	REV.
B	TC	KA750-0-2	B

DIST.

TW

SIZE	CODE	NUMBER	REV.
B	DD	L0002-0	F

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS				
			MODULE REVISION	B	C	D	E	E
B-DD-L0002-0	2		DPM DRAWING DIRECTORY	B	C	D	E	F
E-UA-L0002-0-0	2		DPM UNIT ASSEMBLY	B	C	D	E	E
K-PL-L0002-0-DBP	2		DPM PARTS LIST	B	C	D	D	D
E-MD-5013555-0-0	6		DPM DRILL & ETCH DRAWINGS	B	B	C	C	C
		5013555	ETCHED BOARD	C	C	DP1	DP1	DP1
K-PC-L0002-0-DBI			DPM PC DESIGN DATA BASE IDEA	C	C	D	D	D
K-CS-L0002-0-DBS			DPM DESIGN DATA BASE SUDS	B	C	D	D	E
E-EC-5013555-0-0	3		DPM ETCH CUT DRAWINGS	B	C	D	D	D
D-CS-L0002-0-1	1	*	DATA PATH (03:00)	B	B	B	B	B
D-CS-L0002-0-2	1	*	DATA PATH (07:04)	B	B	B	B	B
D-CS-L0002-0-3	1	*	DATA PATH (11:08)	B	B	B	B	B
D-CS-L0002-0-4	1	*	DATA PATH (15:12)	B	B	B	B	B
D-CS-L0002-0-5	1	*	DATA PATH (19:16)	B	B	B	B	B
D-CS-L0002-0-6	1	*	DATA PATH (23:20)	B	B	B	B	B
D-CS-L0002-0-7	1	*	DATA PATH (27:24)	B	B	B	B	B
D-CS-L0002-0-8	1	*	DATA PATH (31:28)	B	B	B	B	B
D-CS-L0002-0-9	1	*	DATA ROTATOR LOGIC	B	B	B	B	B
D-CS-L0002-0-10	1	*	ALK, CLA, & CCC	B	C	C	C	C
D-CS-L0002-0-11	1	*	SCRATCH PAD CONTROL	B	B	B	B	B
D-CS-L0002-0-12	1	*	CS LATCH, LITREG	B	B	B	B	B
D-CS-L0002-0-13	1	*	HI CONTROL STORE ADD	B	B	B	B	B
D-CS-L0002-0-14	1	*	LO CONTROL STORE ADD	B	B	B	B	B
D-CS-L0002-0-15	1	*	LOW BRANCH BITS	B	C	C	C	C
D-CS-L0002-0-16	1	*	BRANCH BIT 00	B	C	D	D	D

NOTES:

* CONTROL SOURCE IS THE SUDS DATA BASE
NO CONTROLLED PAPER ORIGINALS EXIST

ALL DOCUMENTATION WAS RELEASED AT REVISION 'B'

REVISIONS					
REV.		C	D	E	F
CHG NO.		TW001	TW002	TW003	TW004
DATE		12-80	2-82	12-82	3-83

digital

USED ON OPTION/MODEL	
11/750	

DRN.	J. CASEY
CHK'D	J. CASEY
ENG.	D. LI
PROD.	V. PARKER

TITLE: D P M

SIZE	CODE	NUMBER	REV.
B	DD	L0002-0	F

SHEET 1 OF 3

DRB 126

SIZE	CODE	NUMBER	REV.
B	DD	L0002-0	F

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
D-CS-L0002-0-17	1	*	SYS CLOCK	B C C C C
D-CS-L0002-0-18	1	*	IR DECODE	B C D D D
D-CS-L0002-0-19	1	*	D SIZE & I SIZE	B B C C C
D-CS-L0002-0-20	1	*	CS GRP B PARITY	B B C C C
D-CS-L0002-0-21	1	*	VISIBILITY BUS	B B B B C
D-CS-L0002-0-22	1	*	FORWARD REFERENCE	B B B B B
D-CS-L0002-0-23	1	*	FORWARD REFERENCE	B B B B B
D-CS-L0002-0-24	1	*	FORWARD REFERENCE	B C D D D
D-CS-L0002-0-25	1	*	FORWARD REFERENCE	B B B B B
D-BD-L0002-0-26	2		BLOCK DIAGRAM	B B B B B
D-BD-L0002-0-27	1		ALPCTL FUNCTION CHART	B B B B B

NOTES:

* CONTROL SOURCE IS THE SUDS DATA BASE
NO CONTROLLED PAPER ORIGINALS EXIST

ALL DOCUMENTATION WAS RELEASES AT REVISION 'B'

REVISIONS	REV.	CHG NO.	DATE

digital

USED ON OPTION/MODEL	
11/750	

DRN.	J. CASEY
CHK'D	J. CASEY
ENG.	D. LI
PROD.	V. PARKER

TITLE: D P M

SIZE	CODE	NUMBER	REV.
B	DD	L0002-0	F

SHEET 2 OF 3

DRB 126

SIZE	CODE	NUMBER	REV.
B	DD	L0002-0	F

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
			MODULE REVISION	C1 C1 C1
E-UA-L0002-0	2			C1 C1 C1
E-EC-5013555-0-0	3			C1 C1 C1
		5013555		C C C

NOTES:

REVISIONS	REV.			
	CHG NO.			
	DATE			

digital

USED ON OPTION/MODEL			

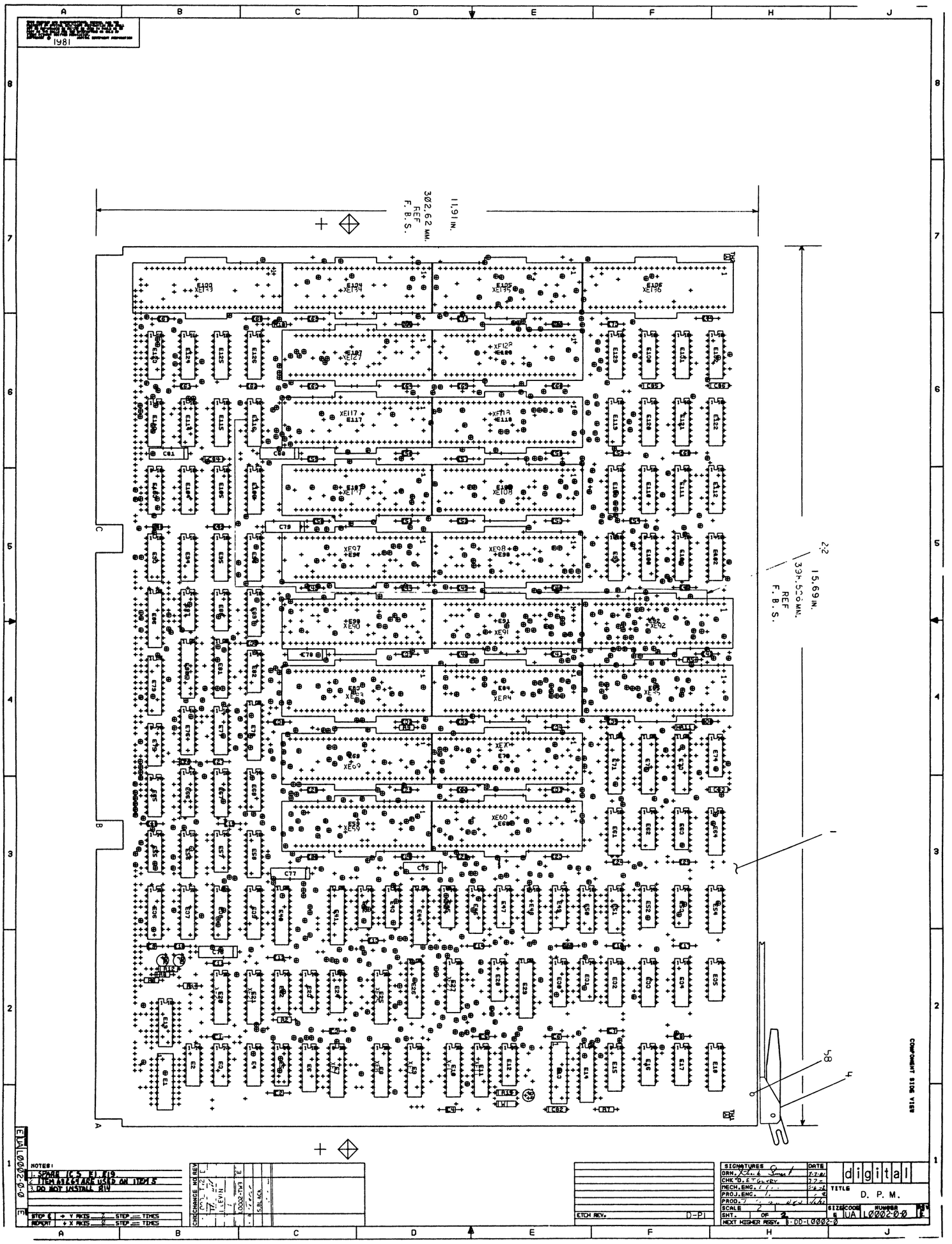
DRN.	T. WALSH	2-24-82
CHK'D	T. WALSH	2-24-82
ENG.	D. LI	
PROD.	V. PARKER	

TITLE: D P M

SIZE	CODE	NUMBER	REV.
B	DD	L0002-0	F

SHEET 3 OF 3

DRB 126



NOTES:
1. SPARE IC'S R1 R15
2. ITEM #1&#4 ARE USED ON ITEM #5
3. DO NOT INSTALL #14

STOP @ + Y AXIS ___ STEP ___ TIMES
REPORT + X AXIS ___ STEP ___ TIMES

CHG/CHANGE NO. REV

SIGNATURES	DATE
DRN.	
CHK'D.	
MECH. ENG.	
PROJ. ENG.	
PROD.	
SCALE	
SHT. OF	

digital

TITLE D. P. M.

SIZE CODE NUMBER REV
E UA L0002-0-0

NEXT HIGHER ASSY. B-DD-L0002-0

ETCH REV. D-P1

ECO #2 REWORK INSTRUCTIONS

WIRE ADDS SIDE 1

2-2 E92-4 TO E116-4

REVISION HISTORY		
DATE	ECO NUMBER	REV

TITLE	D.P.M.	
DOCUMENT NUMBER	L0002-0-0	REV E
SCALE 2/1	SHEET 2 OF 2	

L0002-0-0 D

AUTOMATED BY PRTLST.3L(32)

P A R T S L I S T

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
1	1	E-MD-5013555-0-0	5013555-00	ETCHED CIRCUIT BOARD	1	
2	2	SEE NOTES	1012084-01	8 MFD 25V +75-10% AL EL	7	C75-C80,C81
3	3		1012784-00	.047 MFD 50V +80-20% CER	79	C1-C74,C82,C83,C85,C86,C84
4	4		1210711-02	/REPLACED BY 12-16986-02	1	
5	5		1215924-00	SKT,IC 48PIN DIP GOLD FOR	22	XE59-XE60,XE69-XE70,XE83-XE85, CONT XE90-XE92,XE97,XE98,XE107,XE108, CONT XE117,XE118,XE127,XE128, CONT XE133-XE136
6	6		1300005-04	R NETWORK 15-470 5.0 % 16PIN	2	E61,E89
7	7		1300365-00	1.0 K .25 W 5.0 % CC	1	R10
8	8		1301890-00	560.0 .25 W 5.0 % CC	2	R1,R2
9	9		1811660-21	*** THIS ITEM IS NOT USED ***	-	
10	10		1910532-00	74S00 NAND GATE-QUAD 2IN	5	E17,E24,E31,E52,E35
11	11		1910533-00	74S03 NAND GATE-QUAD 2IN,O	1	E42
12	12		1910534-00	74S04 INVERTER GATE-HEX 1I	4	E4,E45,E55,E57
13	13		1910535-00	74S05 INVERTER GATE-HEX 1	1	E68
14	14		1910536-00	74S10 NAND GATE-TRIPLE 3IN	4	E5,E49,E63,E75
15	15		1910539-00	74S20 NAND GATE-DUAL 4INPU	1	E62
16	16		1910540-00	74S22 NAND GATE-DUAL 4INPU	1	E22
17	17		1910544-00	74S74 FF-D DUAL,EDGE TRIGG	1	E3
18	18		1910545-00	74S112 FF-JK DUAL,EDGE TRIG	1	E56
19	19		1910547-00	74S153 MUX 1 OF 4 (DUAL)	2	E34,E64
20	20		1910548-00	74S157 MUX 1 OF 2 (QUAD)	1	E6
21	21		1910552-00	74S194 SHIFT REG.,4BIT RIGH	1	E30
22	22		1910956-00	74S151 MUX 1 OF 8	9	E18,E32,E33,E46,E54,E66,E67,E76, CONT E77
23	23		1911573-00	74S280 PARITY GEN/CHKR,9BIT	8	E12,E16,E28,E47,E74,E82,E87,E88
24	24		1911675-00	74S138 DECODER/DEMUX 3-8 LIN	1	E48
25	25		1912389-00	74S08 AND GATE-QUAD 2IN,PO	1	E43
26	26		1912586-00	DM 85S68N REGISTER,64BIT EDGE	4	E36-E39

REVISION HISTORY		
ENG	ECO NUMBER	REV
---	INITIAL	B
D.L	L0002-TW001	C
LL	L0002-TW002	D

BASIC PART NO: L0002

SECTION A OF A

SECTION.VARIATION INDEX

[A] 00
[B]
[C]
[D]
[E]
[F]
[H]
[J]
[K]
[L]
[M]
[N]

DRN: D.SIREEN — DATE: 19-OCT-79

CHK'D: E.T. GERRY — DATE: 19-OCT-79

DES.ENG: D. LI — DATE: 19-OCT-79

RESP.ENG.: D. LI — DATE: 19-OCT-79

MFG.ENG.: VANCE PARKER — DATE: 8-FEB-80

ASSEMBLY NUMBER: E-UA-L0002-0-0

TOP DOCUMENT NUMBER: B-DD-L0002-0-0

D I G I T A L

TITLE PARTS LIST

D.P.M.

DOCUMENT NUMBER

SIZE	CODE	NUMBER	REV
K	PL	L0002-0-03P	D

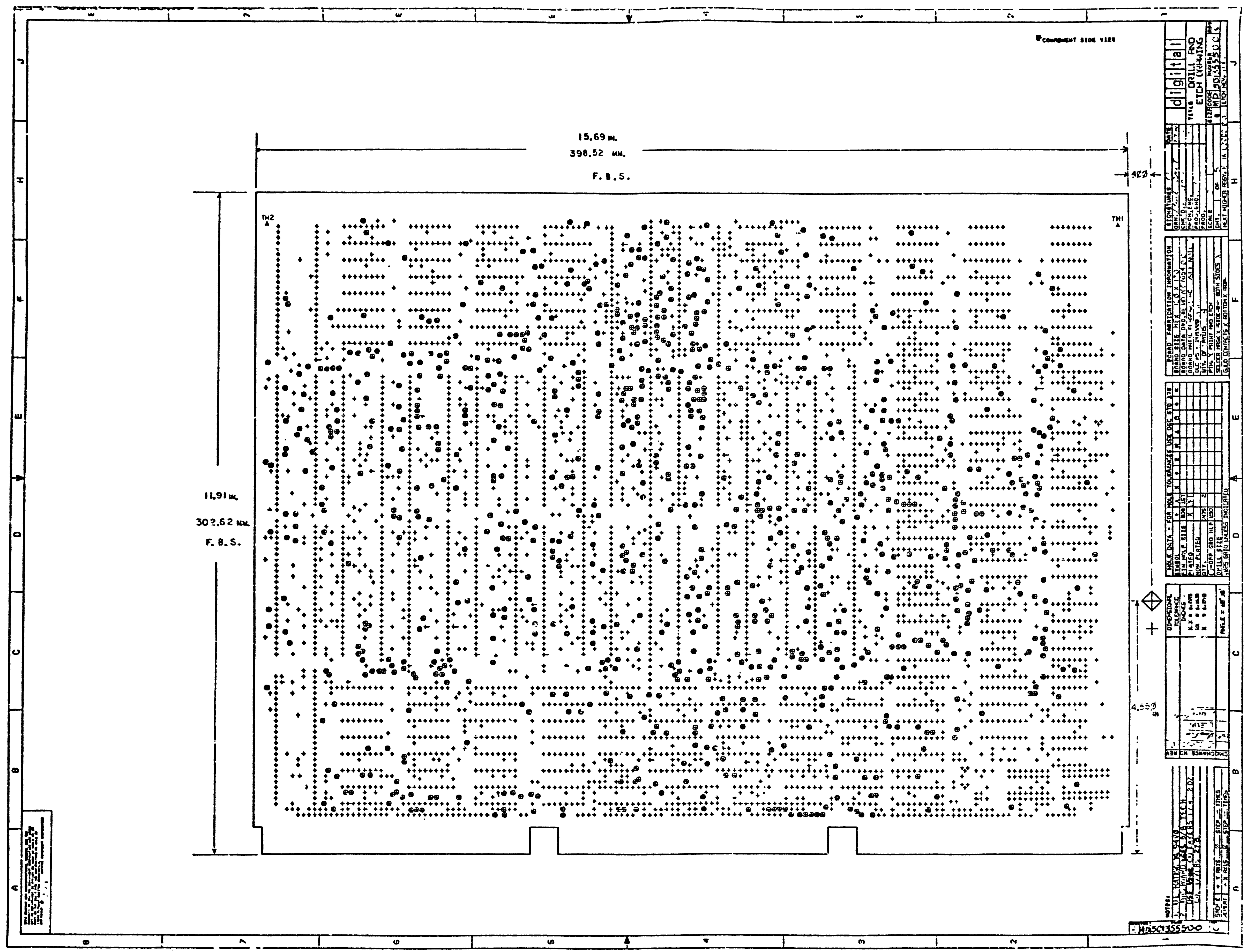
FILE NAME: Z1257D.FLS

EDIT # 19

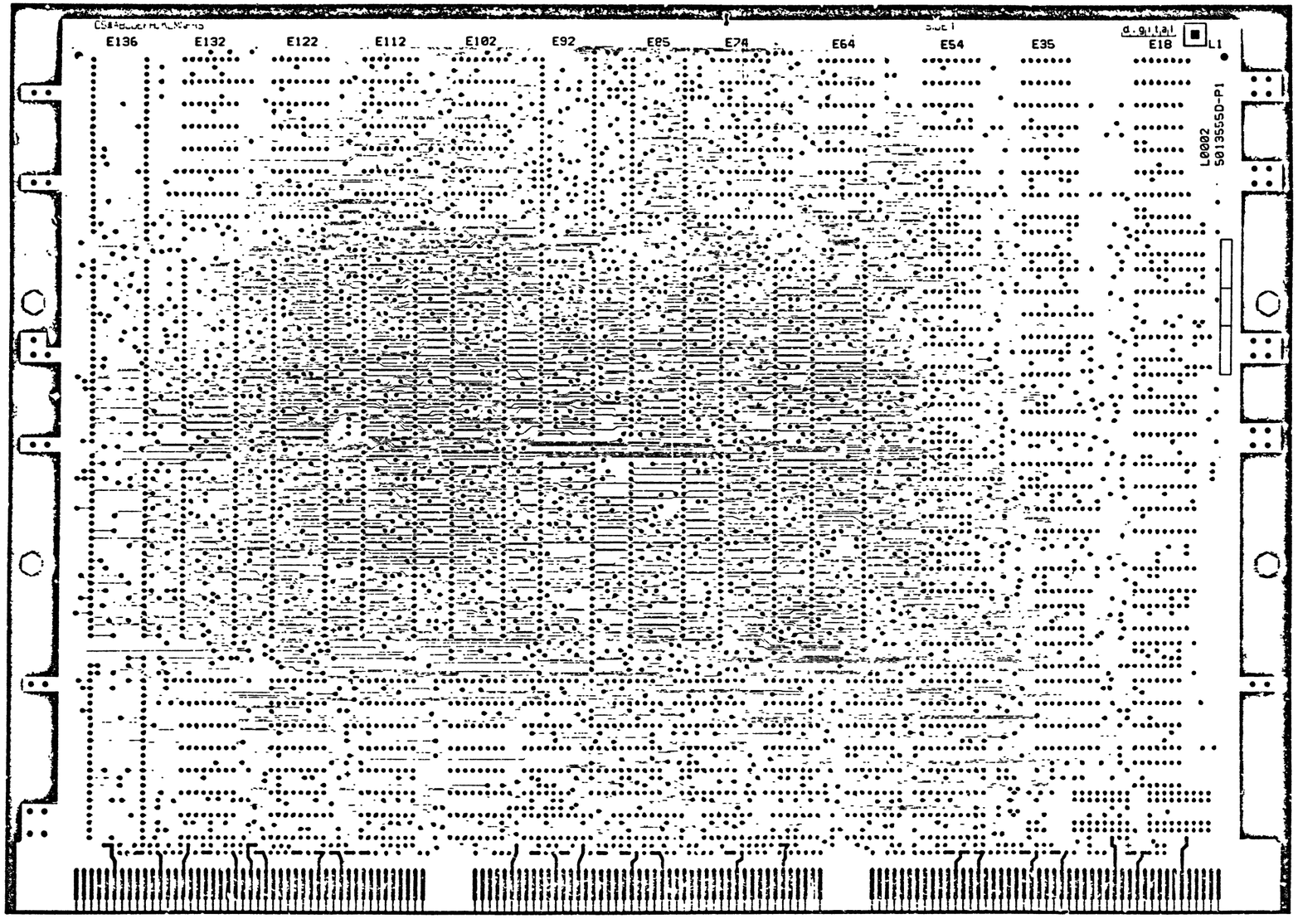
LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
27	27		1912661-00	74S189 MEMORY READ/WRITE	32	E93-E96,E99-E106,E109-E116,
					CONT	E119-E126,E129-E132
28	28		1912746-00	DEC 74S37 NAND GATE-QUAD 2IN	2	E53,E65
29	29		1913462-00	74S240 OCTAL BUFFER,INVERTI	1	E40
30	30		1913493-00	74S241 OCTAL BUFFER,TRI-STA	1	E41
31	31		1913571-00	74S374 FF-D OCTAL TRISTATE	8	E14,E26,E29,E44,E79-E81,E86
32	32		1913339-00	LS165 SHIFT REG.,8BIT	2	E50,E58
33	33		1914085-00	74S260 NOR GATE-DUAL,POS	1	E23
34	34		1914214-00	LS374 FF-D OCTAL EDGE TRIG	5	E13,E71-E73,E78
35	35		1914594-00	DC 620A BIPOLAR,LS,400-GATE	1	E92
36	36		1914682-00	DC 608B BIPOLAR,LS,400-GATE	8	E97,E98,E107,E108,E117,E118,
					CONT	E127,E128
37	37		1914684-00	DC 610B BIPOLAR,LS,400-GATE	1	E70
38	38		1914686-00	DC 612B BIPOLAR,LS,400-GATE	1	E91
39	39		1914687-00	DC 613B BIPOLAR,LS,400-GATE	4	E133-E136
40	40		1914688-00	DC 614C BIPOLAR,LS,400-GATE	1	E84
41	41		1914689-00	DC 615B BIPOLAR,LS,400-GATE	1	E90
42	42		1914690-00	DC 616C BIPOLAR,LS,400-GATE	1	E85
43	43		1914691-00	DC 617C BIPOLAR,LS,400-GATE	1	E69
44	44		1914695-00	DC 621C BIPOLAR,LS,400-GATE	1	E59
45	45		1914696-00	DC 622B BIPOLAR,LS,400-GATE	1	E83
46	46		1914703-00	DC 629C BIPOLAR,LS,400-GATE	1	E60
47	47		23553A2-00	A2-05	1	E51
48	48		23904A9-00	A9-01	1	E15
49	49		23618F1-00	F1-01	1	E20
50	50		23619F1-00	F1-02	1	E21
51	51		23021F2-00	F2-01	1	E7
52	52		23022F2-00	F2-01	1	E25
53	53		23023F2-00	F2-01	1	E27
54	54		23024F2-00	F2-02	1	E8
55	55		23025F2-00	F2-02	1	E9
56	56		23026F2-00	F2-02	1	E10
57	57		23027F2-00	F2-02	1	E11
58	58		9000024-01	EYELET,ROLLED 0.1210DX0.192	12	
59	59		1302379-00	75.0 .25 W 5.0 % CC	7	R5-R9,R11,R15
60	60		1503121-00	2N 2369 NPN 350MW SI N	3	Q2,Q3,Q4
61	61		1912386-00	74S02 NOR GATE-QUAD 2IN,PO	1	E2
62	62		1215006-03	SKT,IC 18PIN DIP TIN SOLD	9	XE7-XE11,XE20,XE21,XE25,XE27
63	63		1215935-00	GASKET, THERMAL .50"X.90"	22	
64	64		1215936-00	HEAT SINK, 2.200X.585	22	
65	65		1305125-00	383.0 .25 W 1.0 % RN55D-F10	1	R12
66	66		9009185-00	JUMPER, WIRE, INSULATED, BLACK 8	1	W1

67 NOTE: SOME MODULES WILL HAVE 10-05306 INSTEAD OF 10-12084-01

DIGITAL	TITLE	SIZE	CODE	DOCUMENT NUMBER	REV
	D.P.M.	K	PL	L0002-0-DBP	D
	SECTION A OF A				


COMPONENT SIDE VIEW
15.69 IN.
398.52 MM.
F.B.S.
.400
TH2
TH1
11.91 IN.
302.62 MM.
F.B.S.
4.553 IN
digital
DRILL AND ETCH DRAWING

LAYER 1


E136
E132
E122
E112
E102
E92
E85
E74
E64
E54
E35
E18
digital
L1
L0002
5013555D-P1

LAYBAR

5013555D-P1

L2

GND

DRILL & ETCH DRAWINGS

EMD5013555-0-0

LAYER: 3

L3

5013555D-P1

PWR

SERIES ETCH DRAWINGS

E MD 5013555-0-C

LAYER 4

L4

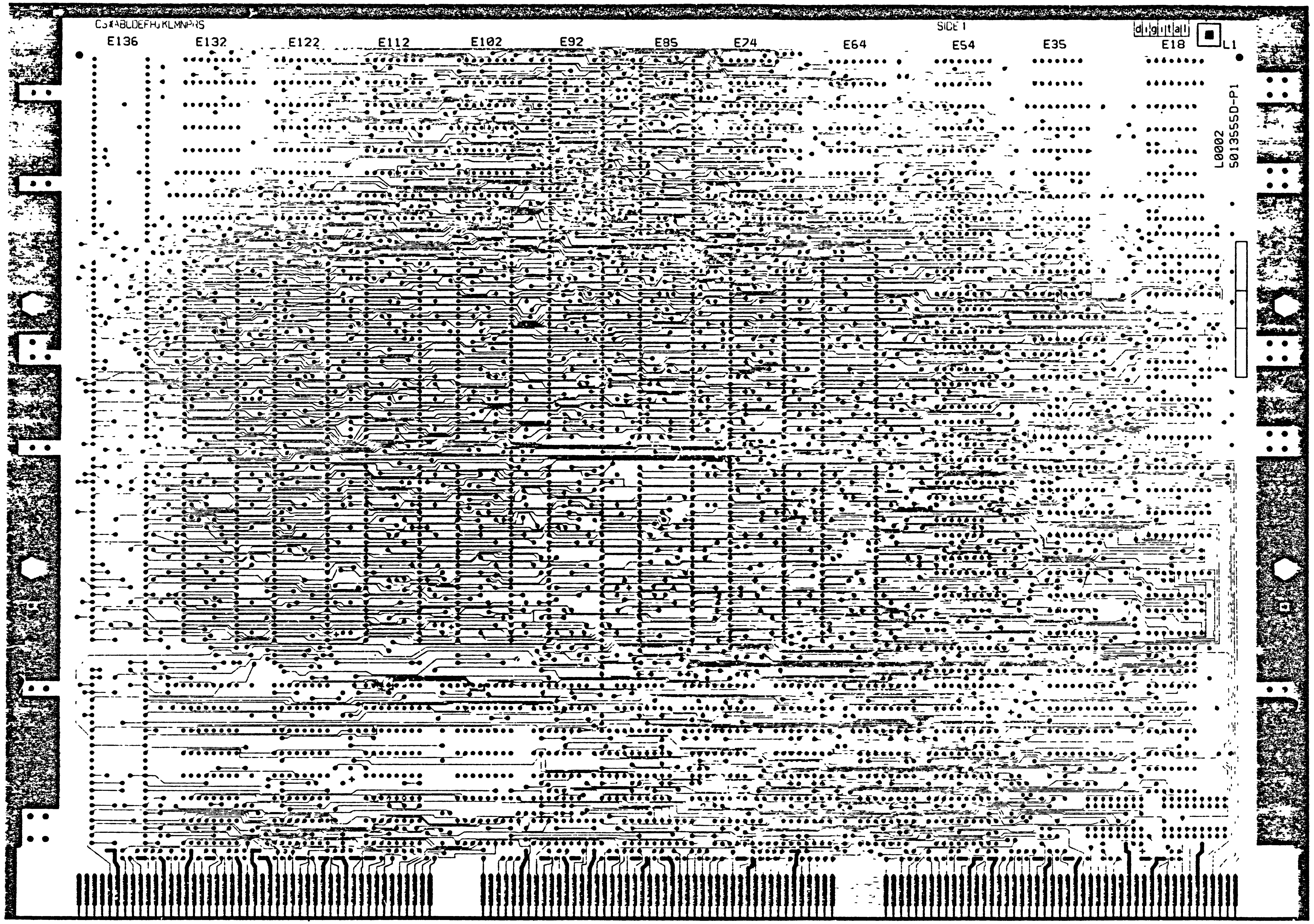
SIDE 2

5013555-0-0 REV

DRILL & ETCH DRAWINGS

5013555-0-0 C

LAYER 1



DESCRIPTION | DRAWING NO

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND THE FOLLOWING TOLERANCES APPLY PER DEC STD

DO NOT SCALE DRAWING

REMOVE BURRS AND BREAK SHARP CORNERS

T WALSH 2-24-82
T WALSH 2-24-82

digital

ETCH CUT DRAWING

E EC 5013555-0-0 D

18 of 3

E C 5013555-0-0 D

REVISION HISTORY | REV D | L0002-YW002 | LEVIN | D

LAYER 4

6 5

EEC50136655-00-D

a의3

ECO*2 REWORK INSTRUCTIONS
ETCH CUTS SIDE 2
2-1 AT PTH LEFT OF E92-4

REVISION HISTORY		
DATE	ECO NUMBER	REV

TITLE	DOCUMENT NUMBER	
ETCH CUT DRAWING	1-2 CODE: E / NUMBER: 5013555-0-0	REV: D
	SCALE: 2:1	SHEET 3 OF 3

5013555-0-0 D

RTMP'S

16X4 RAM 74S189 E99

WBUS 03 H (C12) WBUS 02 H (C16) WBUS 01 H (C5) WBUS 00 H (C28)

DPM11 RSPA 3 H
DPM11 RSPA 2 H
DPM11 RSPA 1 H
DPM11 RSPA 0 H

DPM11 SPW(07:00) L

DPM11 RCS TMP L

GPR'S

16X4 RAM 74S189 E102

WBUS 03 H (C12) WBUS 02 H (C16) WBUS 01 H (C5) WBUS 00 H (C28)

DPM11 RSPA 3 H
DPM11 RSPA 2 H
DPM11 RSPA 1 H
DPM11 RSPA 0 H

DPM11 SPW(07:00) L

DPM11 RCS GPR L

IPR'S

16X4 RAM 74S189 E100

WBUS 03 H (C12) WBUS 02 H (C16) WBUS 01 H (C5) WBUS 00 H (C28)

DPM11 RSPA 3 H
DPM11 RSPA 2 H
DPM11 RSPA 1 H
DPM11 RSPA 0 H

DPM11 SPW(07:00) L

DPM11 RCS IPR L

RBUS 03 L
RBUS 02 L
RBUS 01 L
RBUS 00 L

16X4 RAM 74S189 E101

WBUS 03 H (C12) WBUS 02 H (C16) WBUS 01 H (C5) WBUS 00 H (C28)

DPM11 MSPA 3 H
DPM11 MSPA 2 H
DPM11 MSPA 1 H
DPM11 MSPA 0 H

DPM11 SPW(07:00) L
DPM11 MCS TMP L (B93)

MBUS 03 L (C73)
MBUS 02 L (C88)
MBUS 01 L (C34)
MBUS 00 L (C17)

ARITH & LOGICAL PROCESSOR

DC608 ALP E98

RB3 RB2 RB1 RB0
WB3 WB2 WB1 WB0

(C12) WBUS 03 H
(C16) WBUS 02 H
(C5) WBUS 01 H
(C28) WBUS 00 H

MB3 MB2 MB1 MB0
A3 A0
Q3 Q0

ALU SIO 03 L
ALU SIO 00 L
Q SIO 03 L
Q SIO 00 L

SBUS 06 H
SBUS 05 H
SBUS 04 H
SBUS 03 H
SBUS 02 H
SBUS 01 H
SBUS 00 H

SB6 SB5 SB4 SB3 SB2 SB1 SB0

Z V G P

WMUX2 B0 H
DPM01 G(03:00) L
DPM01 P(03:00) L

DPM09 SHF 1 L
DPM09 SHF 0 L

SHF1 SHF0

DPM13 +3V NOM H

MBXE

DPM11 DP PHASE H

LCK

DPM17 QD CLK L

QDCK

DPM10 ALUC 00 L

CYIN

DPM12 ALPCTL 9 H
DPM12 ALPCTL 8 H
DPM12 ALPCTL 7 H
DPM10 ALK OP 6 H
DPM10 ALK OP 5 H
DPM10 ALK OP 4 H
DPM12 ALPCTL 3 H
DPM12 ALPCTL 2 H
DPM10 ALK OP 1 H
DPM10 ALK OP 0 H

OPC9 OPC8 OPC7 OPC6 OPC5 OPC4 OPC3 OPC2 OPC1 OPC0

+5.0V A

E61 470Ω ALU SIO 03 L
E61 470Ω ALU SIO 00 L
E61 470Ω Q SIO 03 L
E61 470Ω Q SIO 00 L
E61 470Ω WMUX2 B0 H

NOTES:

1. SPLIT VCC IS SUPPLIED TO I.C.'S AS FOLLOWS:
   +5.0V A (A20,A38,A58,A76,B20):E1-E52,E55-E62,E65-E69,E83
   +5.0V B/(B38,B58,B76):E53,E54,E63,E64,E70-E82,E84-E92
   +5.0V C/(C20,C38,C58,C76):E93-E136
2. ALL RESISTORS 1/4W 5% UNLESS OTHERWISE SPECIFIED.
3. POWER,GND DECOUPLING CAPS ARE LOCATED ON SHEET DPM21.

REVISIONS		
CHK	CHANGE NO.	REV

digital

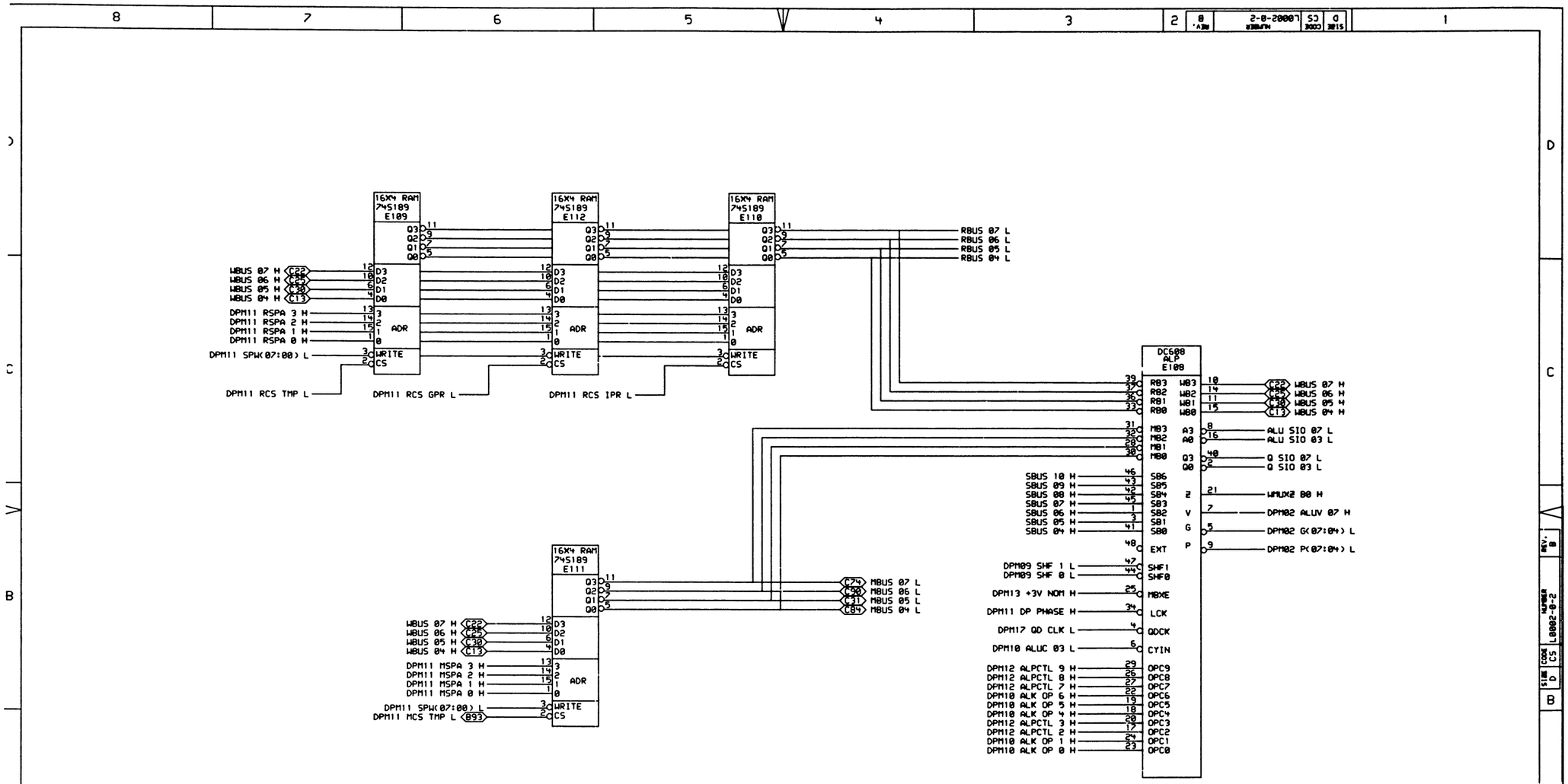
DRN. J Perrin — DATE 26-MAR-80
CHK'D. — DATE
ENG. — DATE
BOARD LOCATION: AC2
SHEET 1 OF 1

(160,127) DPM01.DRW 24-MAR-80 09:10
FIRST USED ON OPTION/MODEL: 11/750
NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0

TITLE: DPM01 DATA PATH (03:00)

SIZE D | CODE CS | NUMBER L0002-0-1 | REV. B

COMETCHIPS, (160,127) DPM01.DPL, SCALE 2, "D" RELEASE BOM



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. J Bessin — DATE 26-MAR-88 — ENG. — DATE — TITLE: DPM02 DATA PATH (07:04)

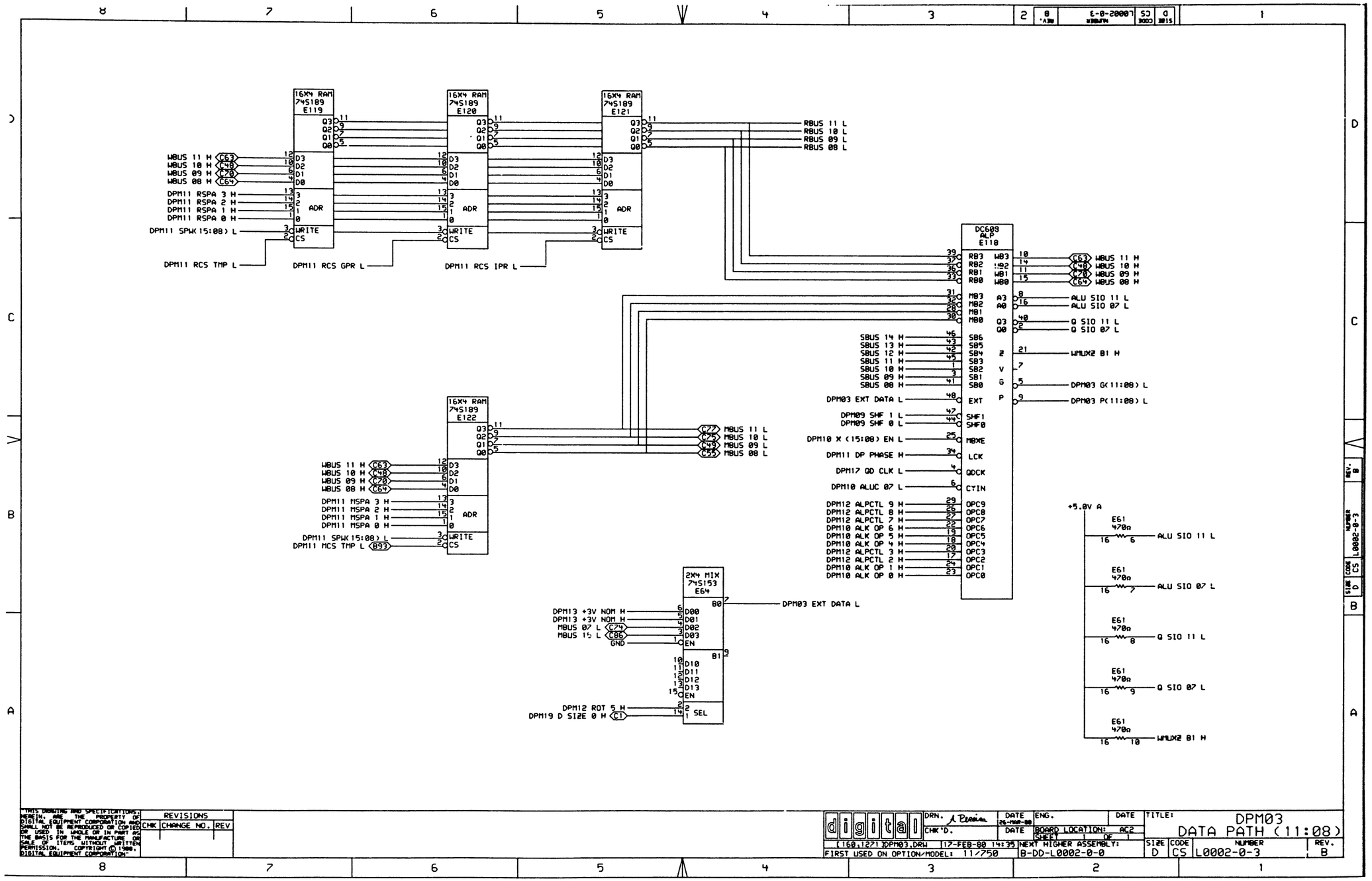
CHK'D. — DATE — BOARD LOCATION: AC2 — SHEET 1 OF 1

[160,1271]DPM02.DRW — 17-FEB-88 14:32 — NEXT HIGHER ASSEMBLY: B-DD-L0002-0-6

FIRST USED ON OPTION/MODEL: 11/750

SIZE	CODE	NUMBER	REV.
D	C5	L0002-0-2	B

COMETCHIPS, [160,1271]DPM02.DPL, SCALE 2, "D" RELEASE BOX



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. J Preiss | DATE 26-MAR-80 | ENG. | DATE
CHK'D. | DATE | BOARD LOCATION: AC2 | SHEET 1 OF 1

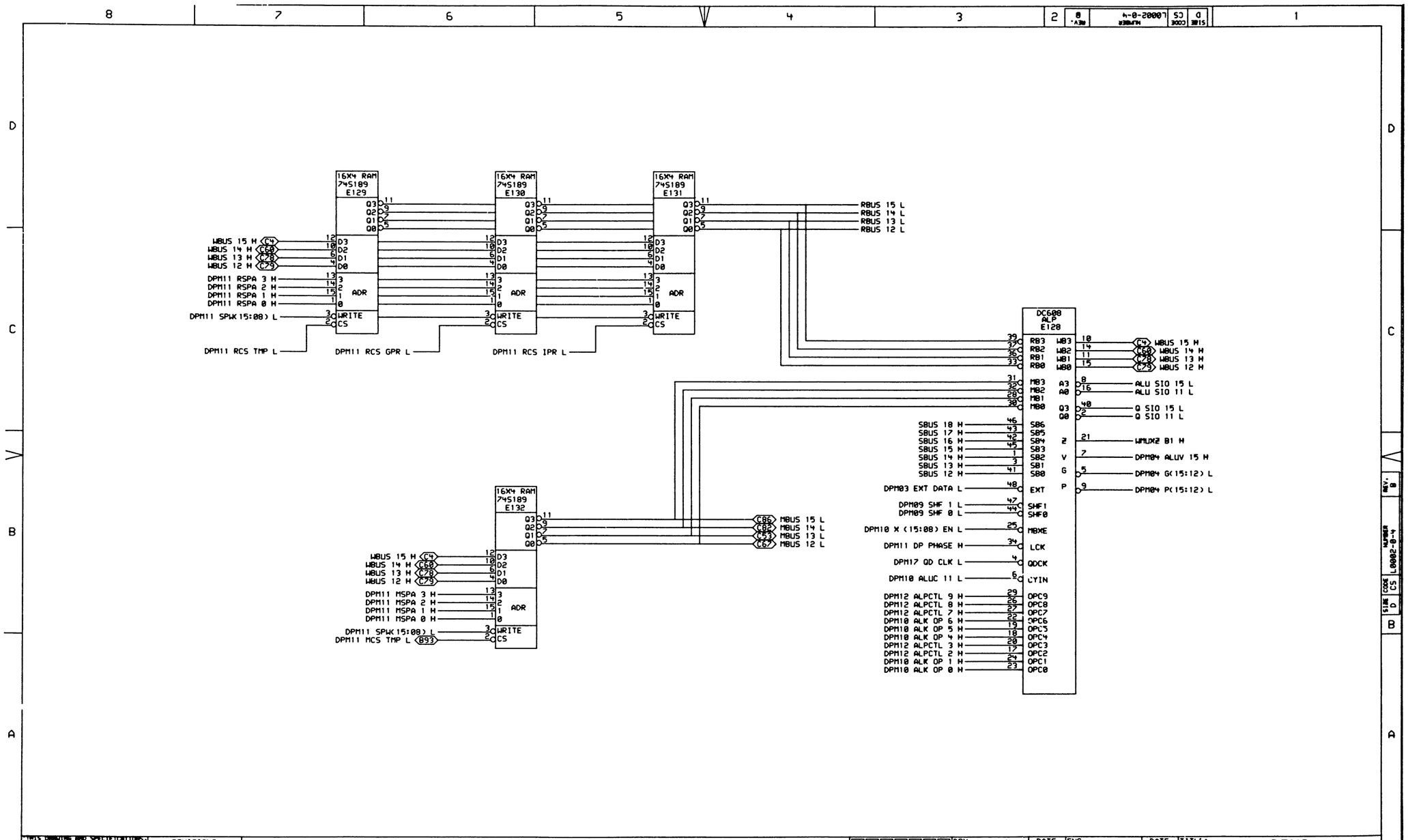
TITLE: DPM03 DATA PATH (11:08)

[160,1271]DPM03.DRW | 17-FEB-80 14:35 | NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0

FIRST USED ON OPTION/MODEL: 11/750

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-3	B

COMETCHIPS, [160,1271]DPM03.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM03.PLO[160,1271] 26-MAR-80 11:28



REVISIONS		
CHK	CHANGE NO.	REV

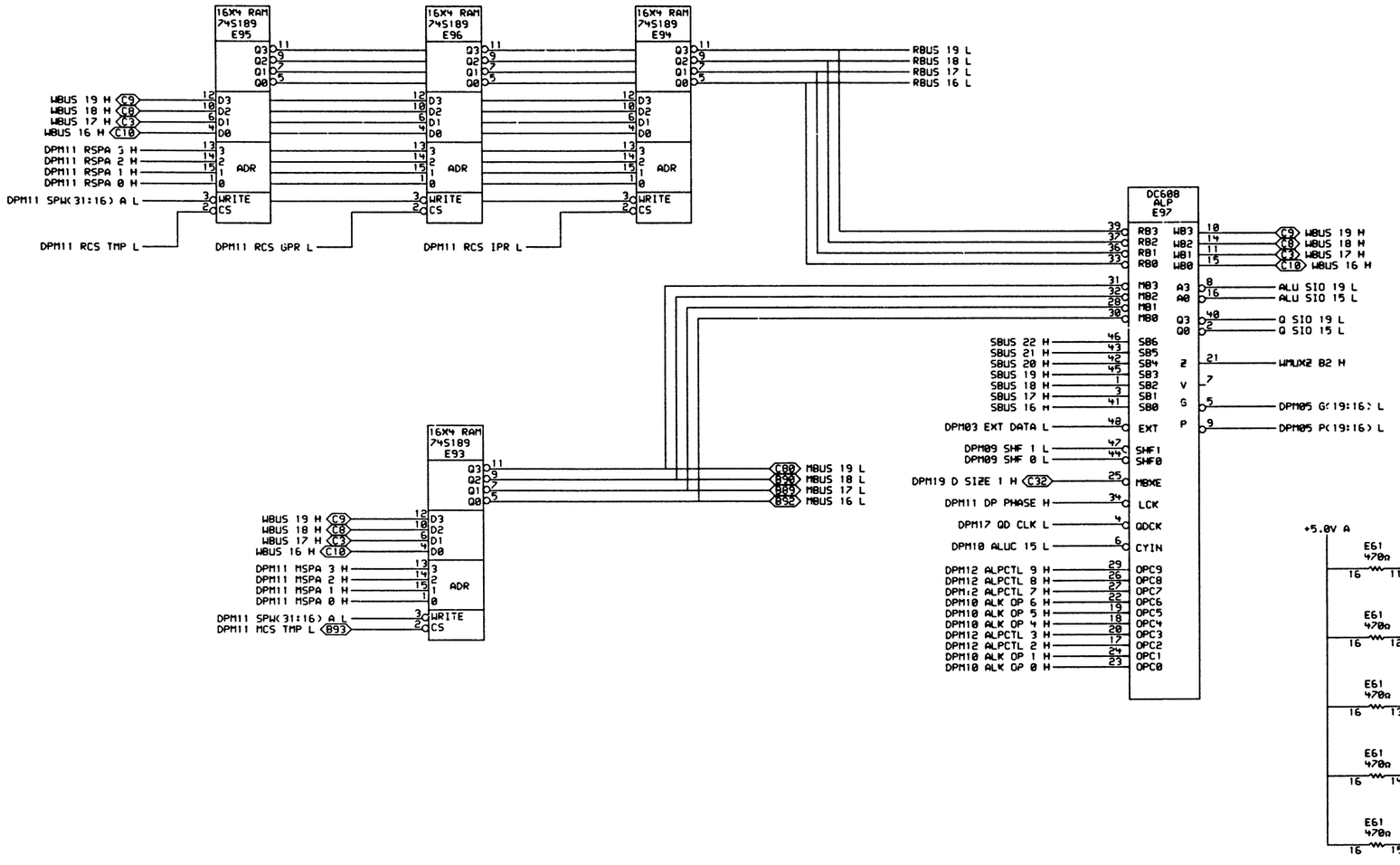
digital

DRN. J. Brosius — DATE 26-MAR-80
CHK'D. — DATE
ENG. — DATE
BOARD LOCATION: AC2
SHEET 1 OF 1
(160,127)DPM04.DRW 17-FEB-80 14:38
FIRST USED ON OPTION/MODEL: 11/750
NEXT HIGHER ASSEMBLY: B-DD-L00002-0-0

TITLE: DPM04 DATA PATH (15:12)

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-4	B

COMETCHIPS, (160,127)DPM04.DPL, SCALE 2, "D" RELEASE BOX



REVISIONS		
CHK	CHANGE NO.	REV

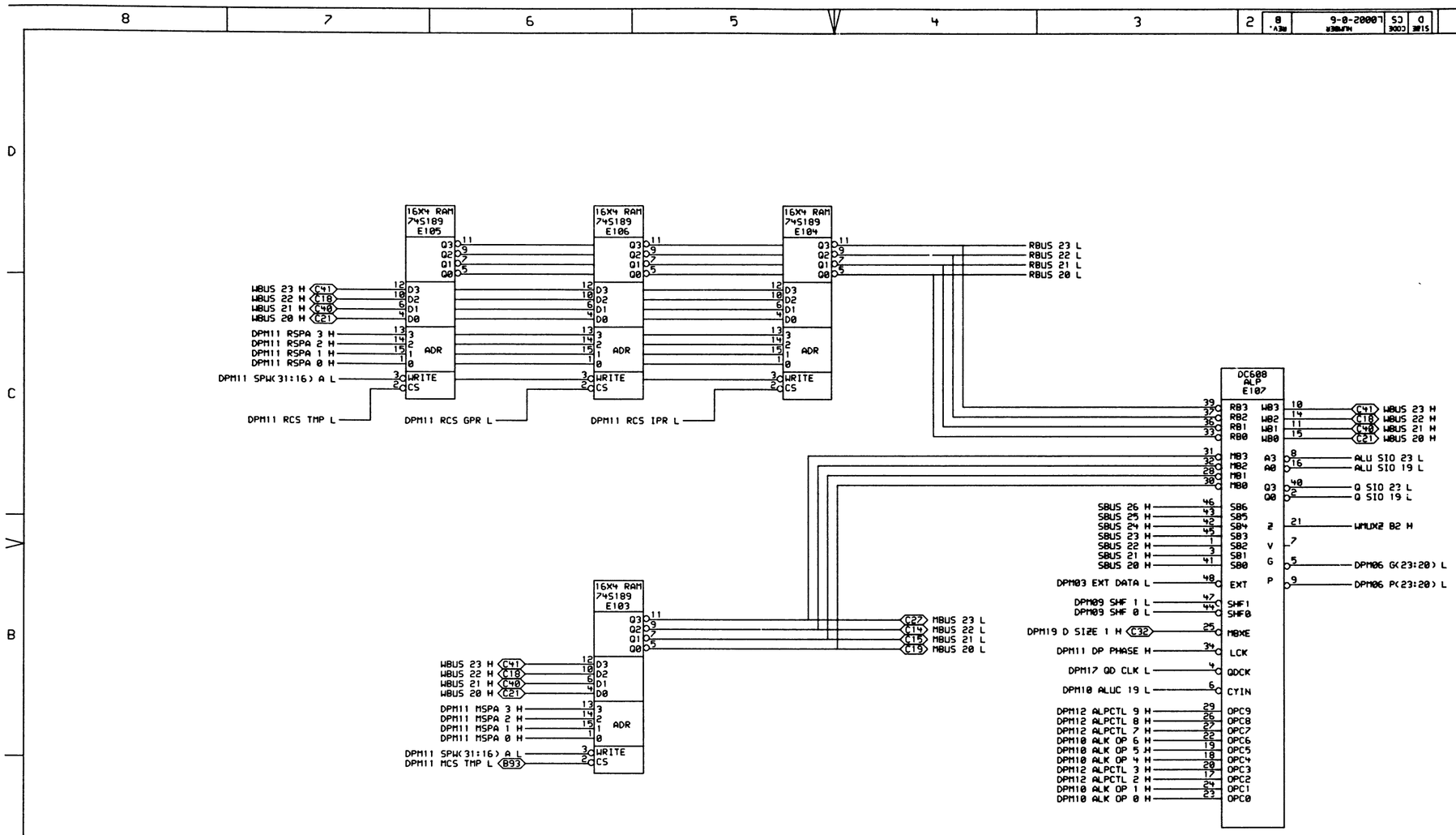
digital

DRN. J. Brown — DATE 26-MAR-80
CHK'D. — DATE
ENG. — DATE
BOARD LOCATION: AC2
SHEET 1 OF 1
(160,1271)DPM05.DRW 17-FEB-80 14:41
NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0
FIRST USED ON OPTION/MODEL: 11/750

TITLE: DPM05 DATA PATH (19:16)

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-5	B

COMETCHIPS, [160,1271]DPM05.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM05.PLO[160,1271] 26-MAR-80 11:29



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REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. A Preiss — DATE 26-MAR-80 — ENG. — DATE
CHK'D. — DATE — BOARD LOCATION: AC2 — SHEET 1 OF 1
(160,127) DPM06.DRW — 17-FEB-80 14:43 — NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0
FIRST USED ON OPTION/MODEL: 11/750

TITLE: DPM06 DATA PATH (23:20)

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-6	B

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REVISIONS		
CHK	CHANGE NO.	REV

digital

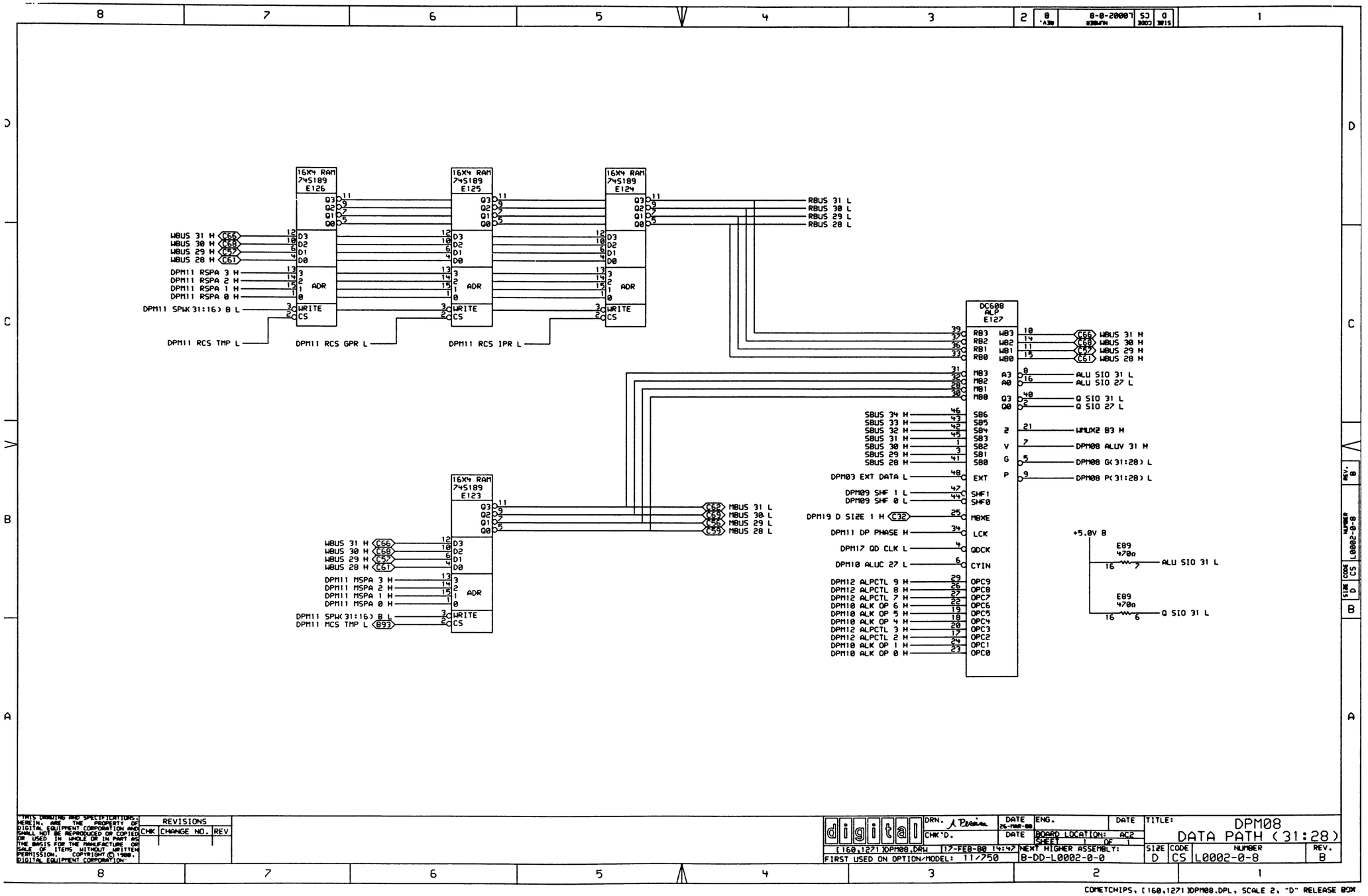
DRN. A Pierce — DATE 26-MAR-80
CHK'D. — DATE
ENG. — DATE
BOARD LOCATION: AC2
SHEET 1 OF

(160,127)DPM07.DRW — 17-FEB-80 14:44
FIRST USED ON OPTION/MODEL: 11/750
NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0

TITLE: DPM07 DATA PATH (27:24)

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-7	B

COMETCHIPS, (160,127)DPM07.DPL, SCALE 2, "D" RELEASE BOX



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REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. A Brown — DATE 26-MAR-80 — ENG. — DATE

CHK'D. — DATE — BOARD LOCATION: AC2

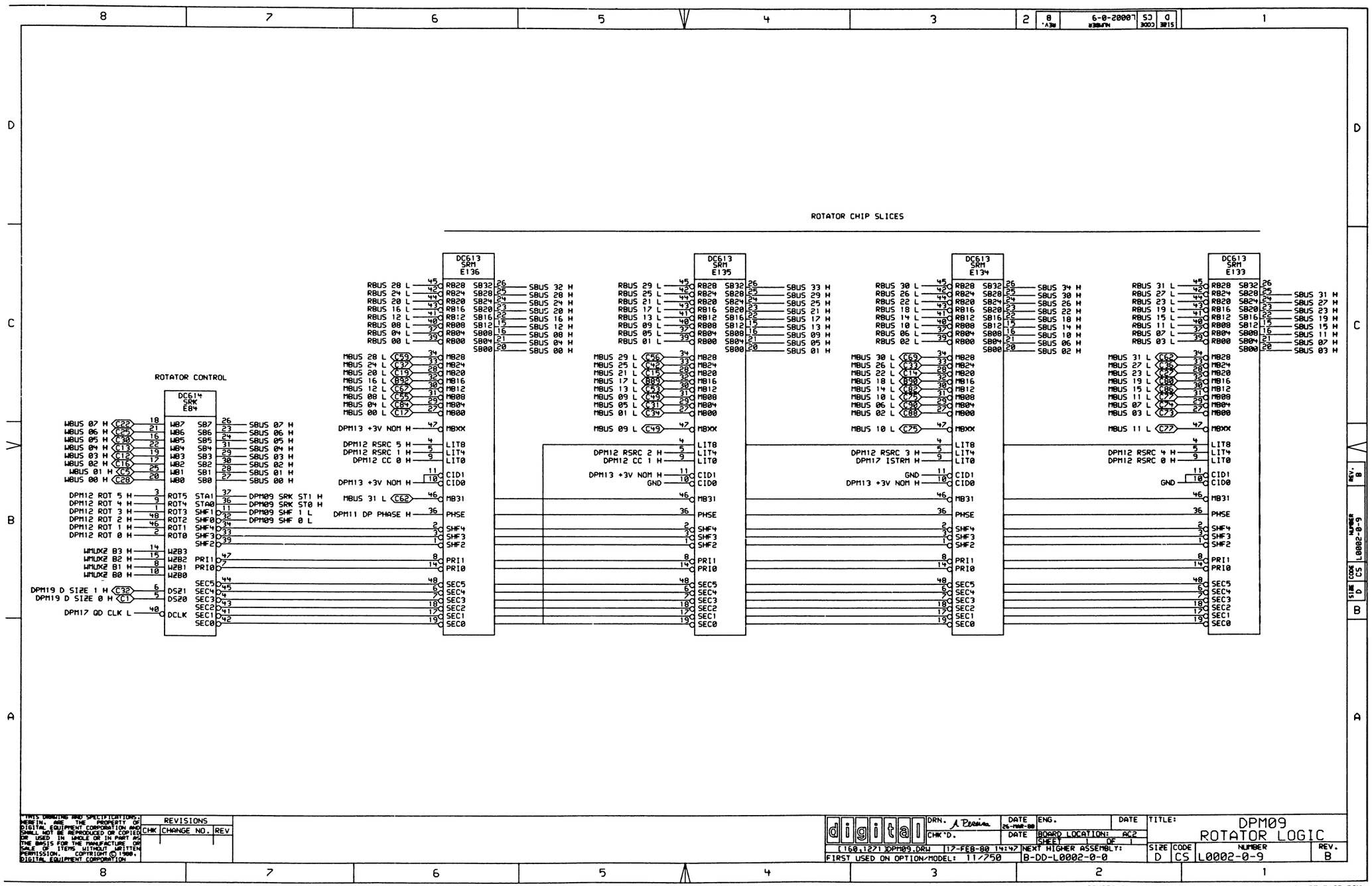
(160,127)DPM08.DRW 17-FEB-80 14:42 — SHEET 1 OF 1

FIRST USED ON OPTION/MODEL: 11/750 — NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0

TITLE: DPM08 DATA PATH (31:28)

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-8	B

COMETCHIPS, (160,127)DPM08.DPL, SCALE 2, "D" RELEASE BOX



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REVISIONS		
CHK	CHANGE NO.	REV

digital

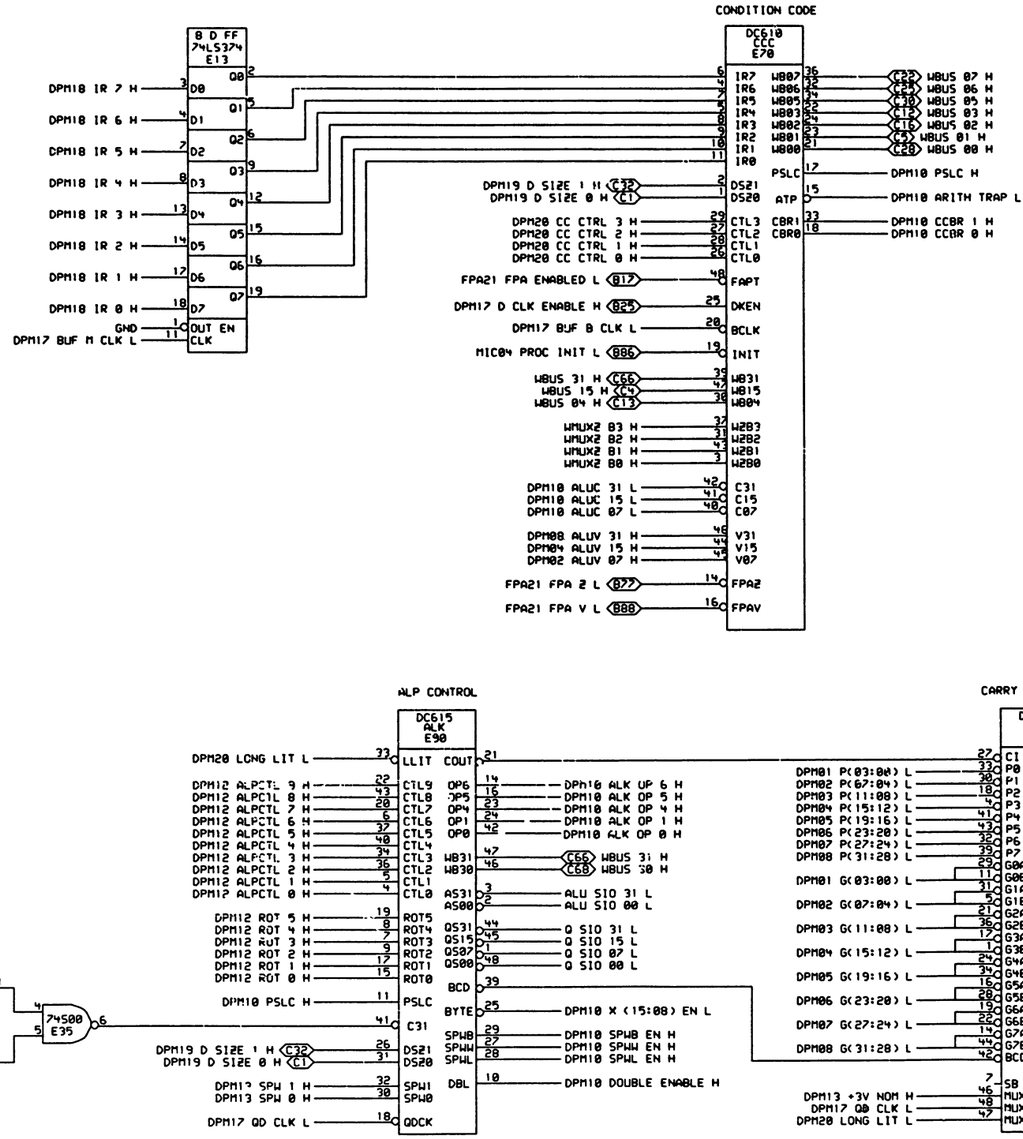
DRN. A Perrin — DATE 26-MAR-80 — ENG. — DATE
CHK'D. — DATE — BOARD LOCATION: AC2 — SHEET 1 OF 1

[160,1271]DPM09.DRW 17-FEB-80 14:47 — NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0
FIRST USED ON OPTION/MODEL: 11/750

TITLE: DPM09 ROTATOR LOGIC

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-9	B

COMETCHIPS, [160,1271]DPM09.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM09.PLO[160,1271] 26-MAR-80 11:30



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REVISIONS		
CHK	CHANGE NO.	PEV

digital

DRN. J Brosius — DATE 09-SEP-88 — ENG. — DATE

CHK'D. — DATE — BOARD LOCATION: AC2 — SHEET 1 OF 1

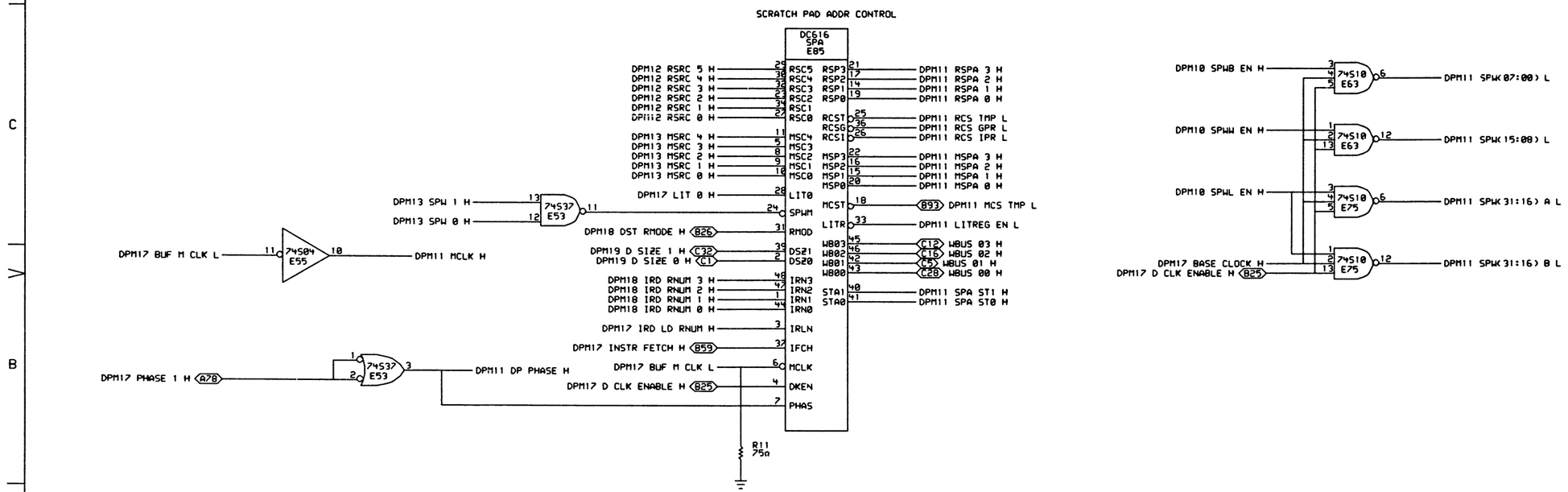
(160,1271)DPM10.DRW 25-AUG-88 11:01 — NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0

FIRST USED ON OPTION/MODEL: 11/750

TITLE: DPM10 ALK,CLA & CCC

SIZE D | CODE CS | NUMBER L0002-0-10 | REV. C

COMETCHIPS, (160,1271)DPM10.DPL, SCALE 2, D" PRESS BOX
COMETCHIPS DPM10.PLOC(160,1271) 09-SEP-88 13:43



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REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. A Preiss — DATE 26-MAR-80 — ENG. — DATE — CHK'D. — DATE

[160,1271]DPM11.DRW 17-FEB-80 14:50

FIRST USED ON OPTION/MODEL: 11/750

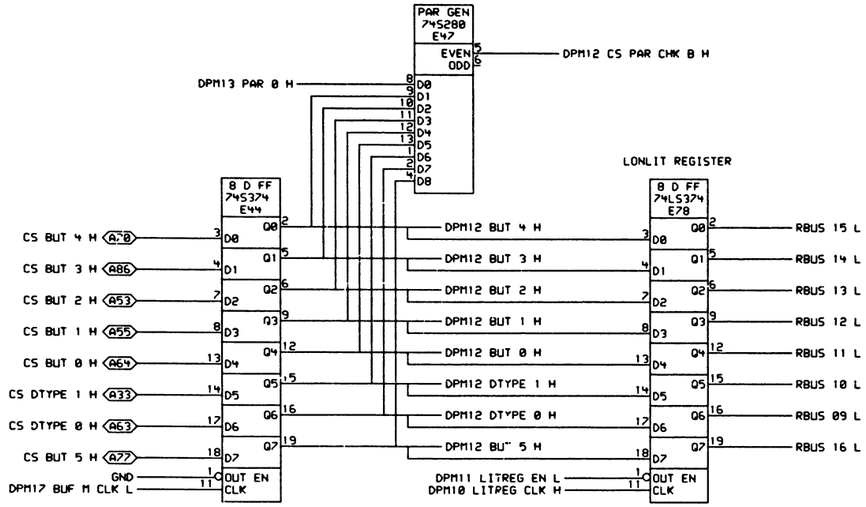
BOARD LOCATION: AC2
SHEET 1 OF 1

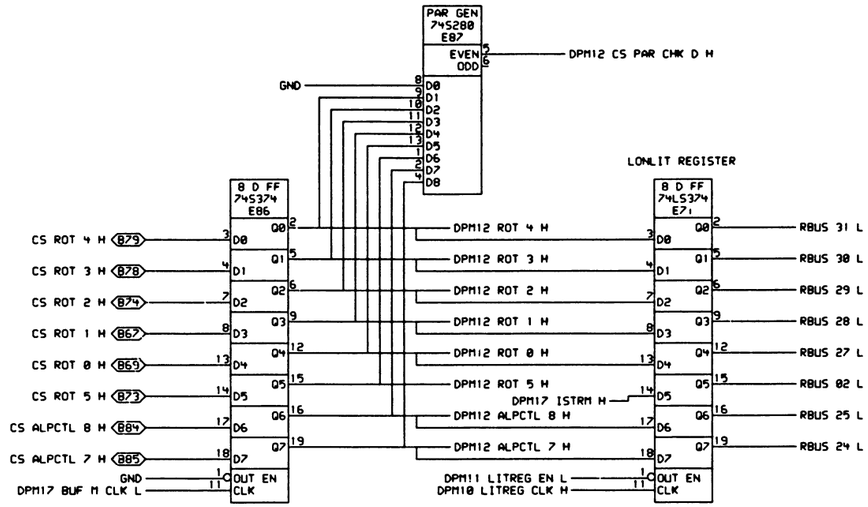
NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0

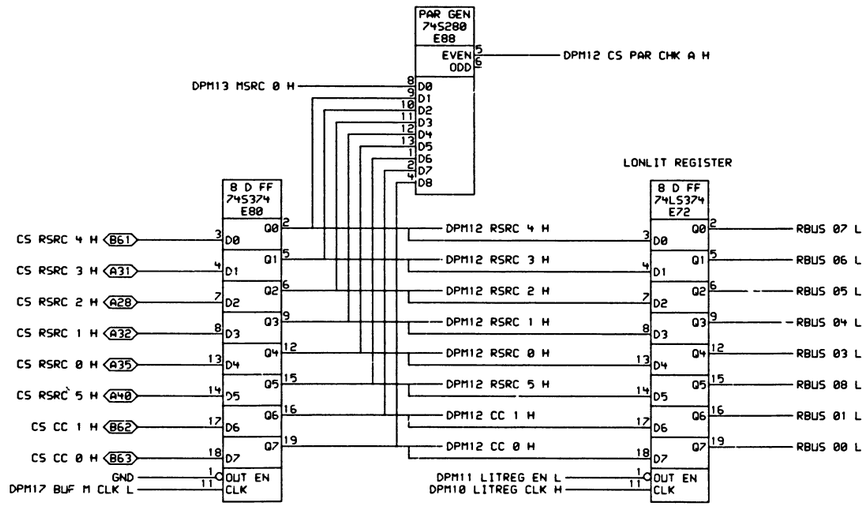
TITLE: DPM11 SCRATCH PAD CONTROL

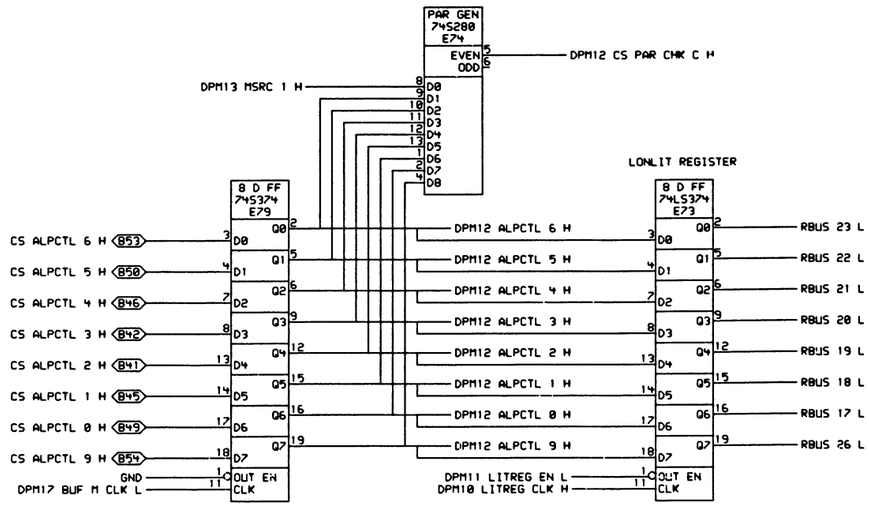
SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-11	B

COMETCHIPS, [160,1271]DPM11.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM11.PLO[160,1271] 26-MAR-80 11:31









REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. J. Pierce — DATE 26-MAR-80 — ENG. — DATE
CHK'D. — DATE — BOARD LOCATION: AC2 — SHEET 1 OF 1

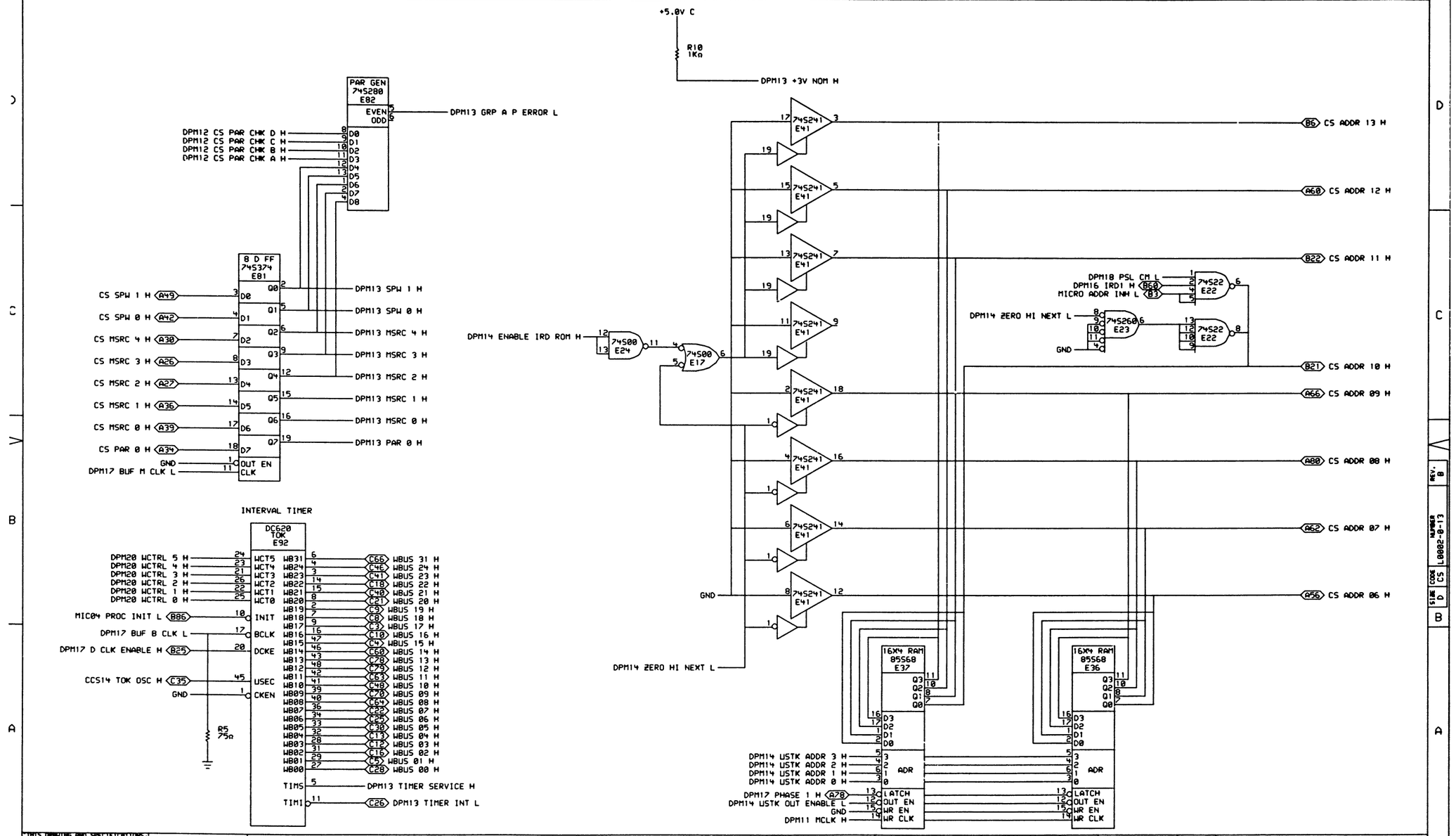
[160,1271]DPM12.DRW 17-FEB-80 14:51 — NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0

FIRST USED ON OPTION/MODEL: 11/750

TITLE: DPM12 CS LATCH,LITREG

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-12	B

COMETCHIPS, [160,1271]DPM12.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM12.PLO[160,1271] 26-MAR-80 11:32



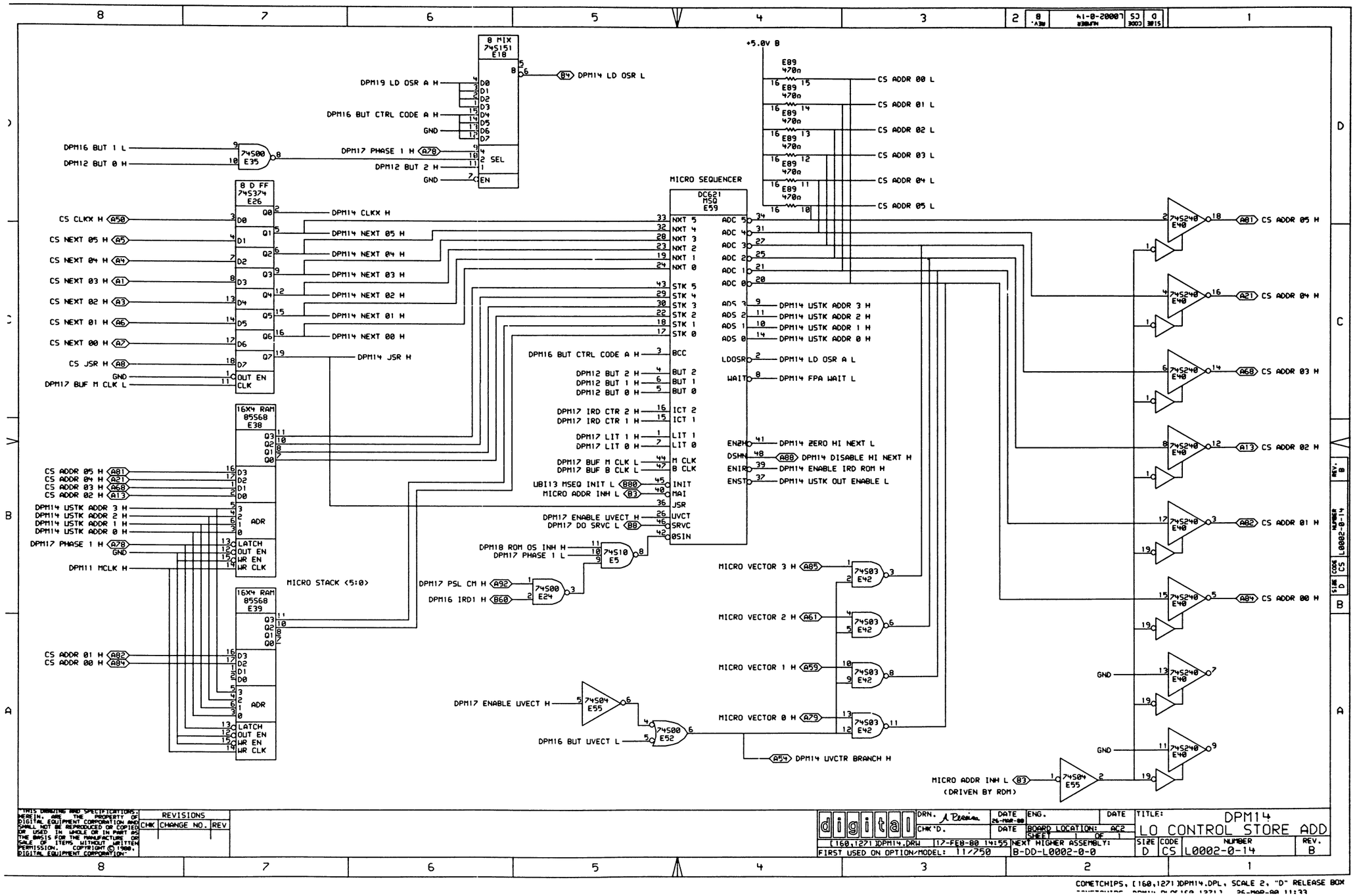
REVISIONS		
CHK	CHANGE NO.	REV

digital

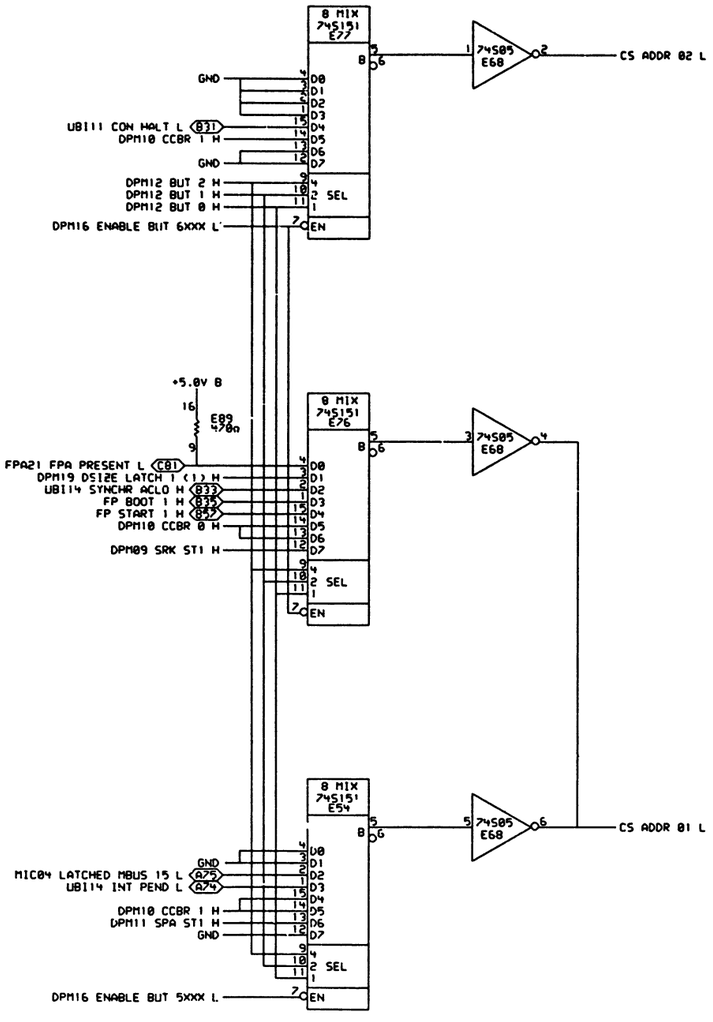
DRN. J. Perrin — DATE 26-MAR-80 — ENG. — DATE
CHK D. — DATE — BOARD LOCATION: AC2 — SHEET 1 OF 1
[160,1271]DPM13.DRW — 17-FEB-80 14:53 — NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL: 11/750 — B-DD-L0002-0-0

TITLE: DPM13 HI CONTROL STORE ADD

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-13	B



COMETCHIPS, [160,1271]DPM14.DPL, SCALE 2, "D" RELEASE BOX



REVISIONS		
CLTR	CHANGE NO.	REV

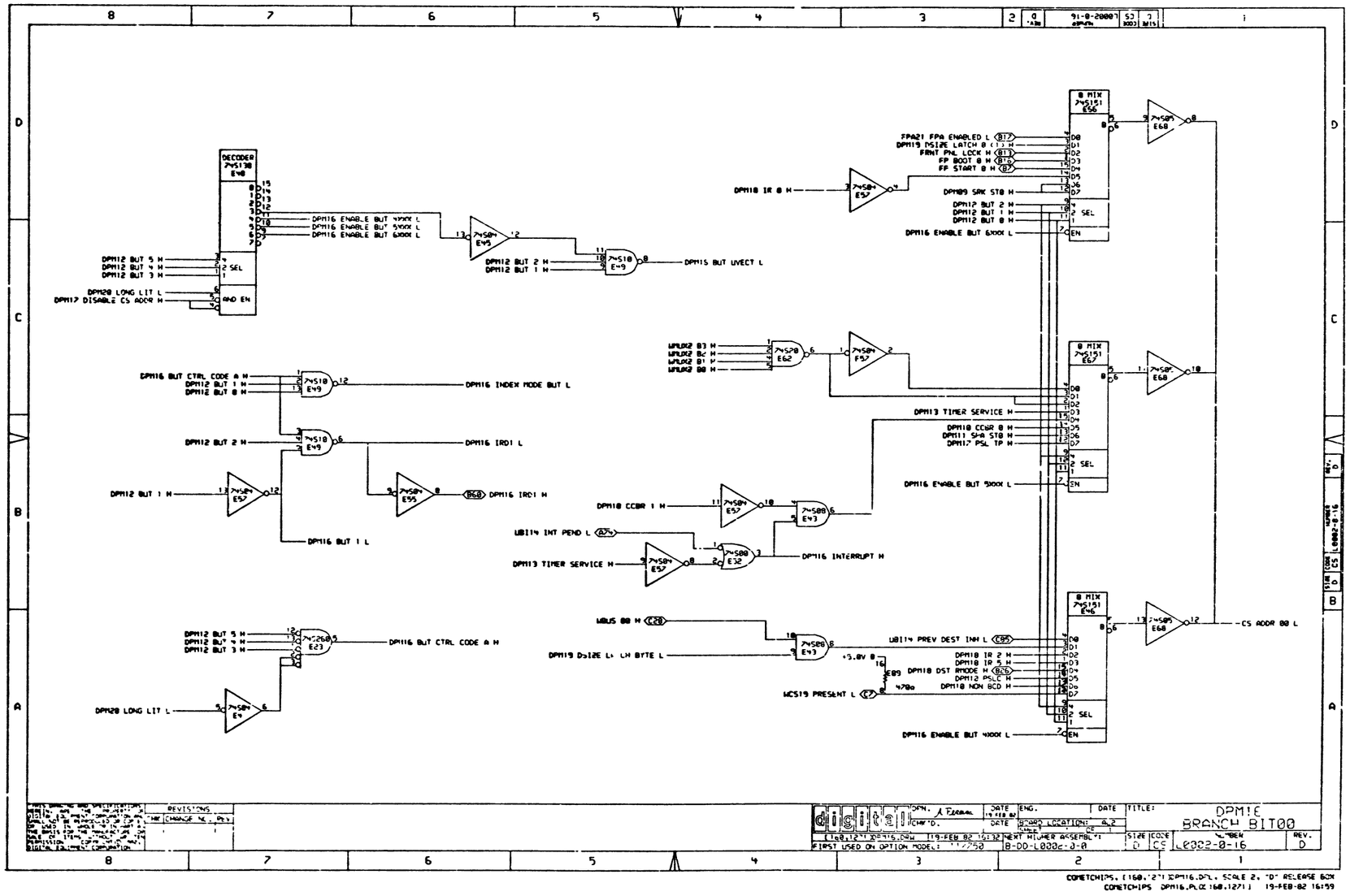
digital

DRN. A Brenna — DATE 09-SEP-80
CHK'D. — DATE
ENG. — DATE
BOARD LOCATION: AC2
SHEET 1 OF 1
[160,1271]DPM15.DRW 25-AUG-80 11:13
FIRST USED ON OPTION/MODEL: 11/750
NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0

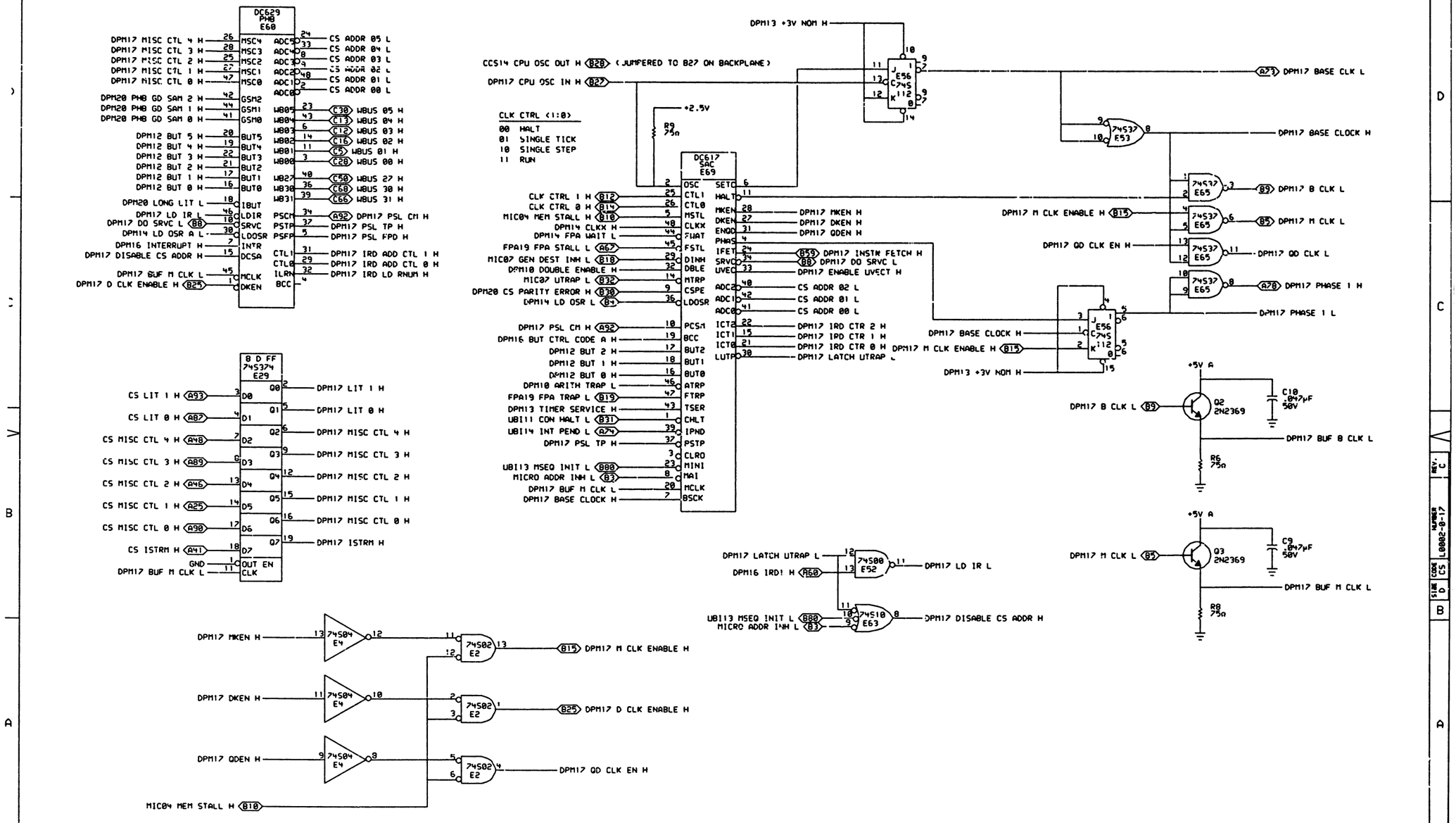
TITLE: DPM15 LOW BRANCH BITS

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-15	C

COMETCHIPS, [160,1271]DPM15.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM15.PLO[160,1271] 09-SEP-80 13:44



COMETCHIPS, [160,127]DPM16.DPL, SCALE 2, "D" RELEASE 60X
COMETCHIPS DPM16.PLOZ [160,127] 19-FEB-82 16:59



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REVISIONS		
CHK	CHANGE NO.	REV

digital

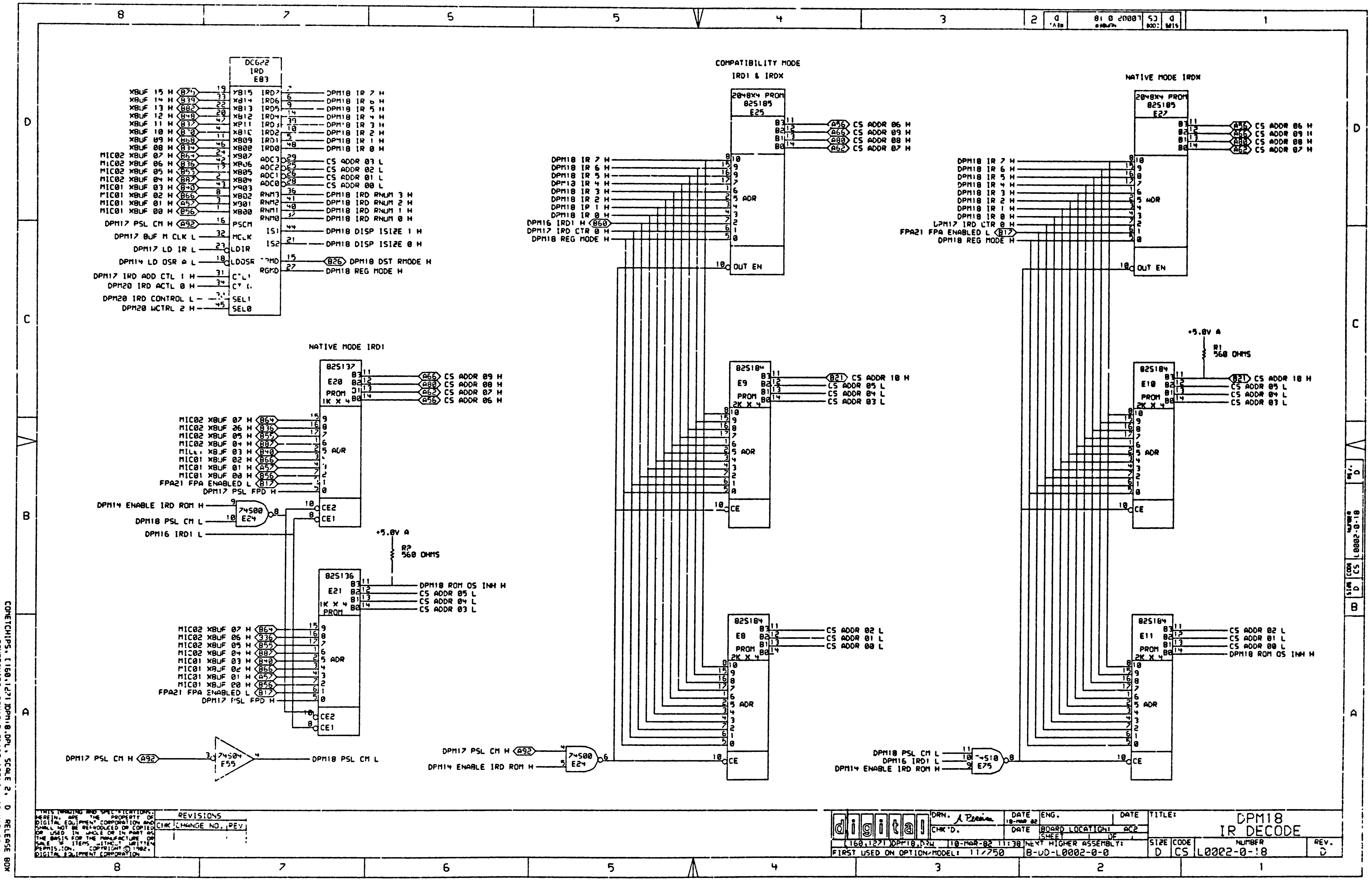
DRN. A Brenan — DATE 09-SEP-80 — ENG. — DATE
CHK'D. — DATE — BOARD LOCATION: AC2 — SHEET 1 OF 1

(160,127) DPM17.DRW 25-AUG-80 11:29 — NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0
FIRST USED ON OPT'ON/MODEL: 11/750

TITLE: DPM17 SYS CLOCK

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-17	C

COMETCHIPS, [160,127]DPM17.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM17.PLO[160,127] 09-SEP-80 13:46

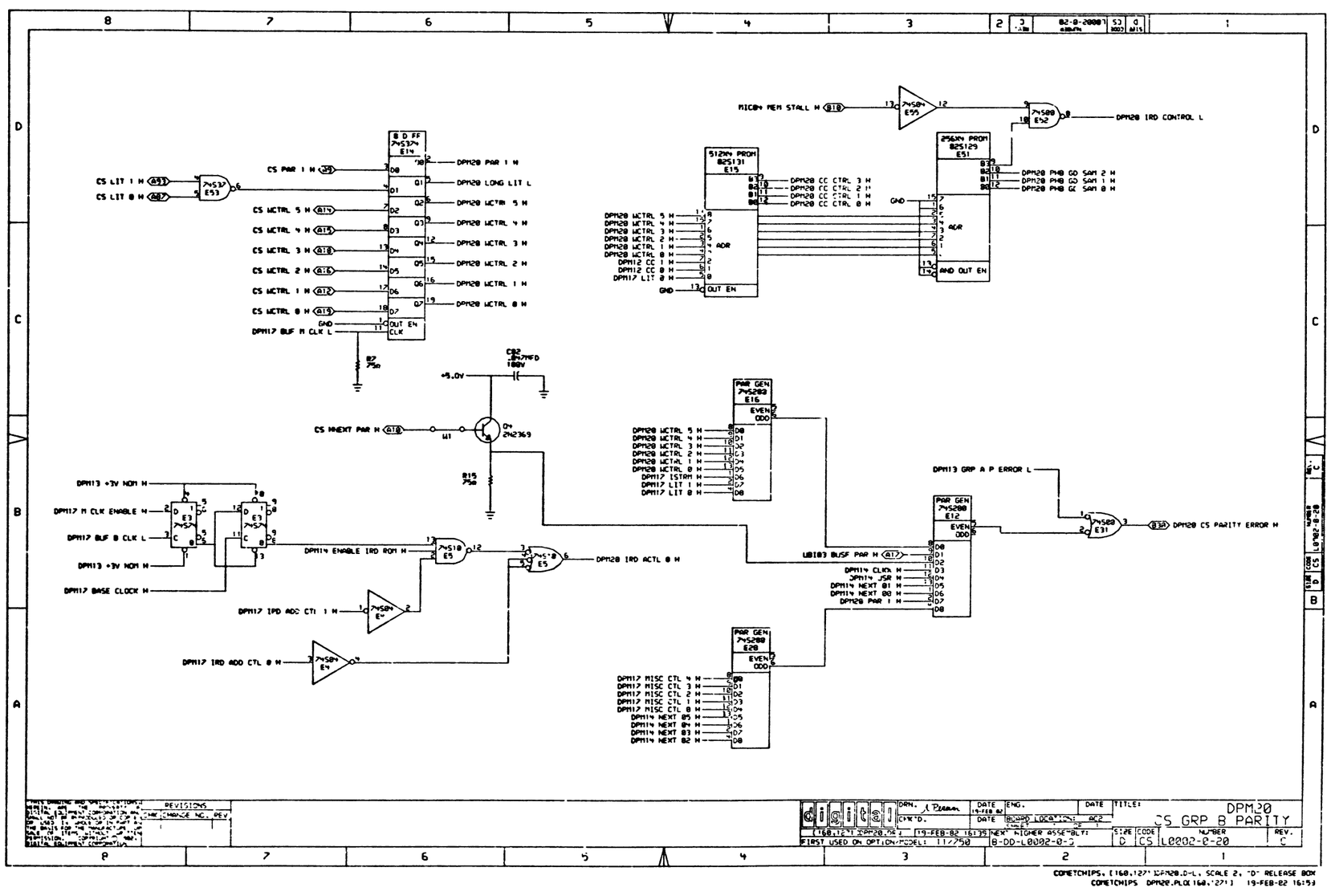


CORECHIPS, [160,127]DPM18.DPL, SCALE 2, D RELEASE BOX
CORECHIPS DPM18.PLO[160,127] 18-MAR-82 14:11

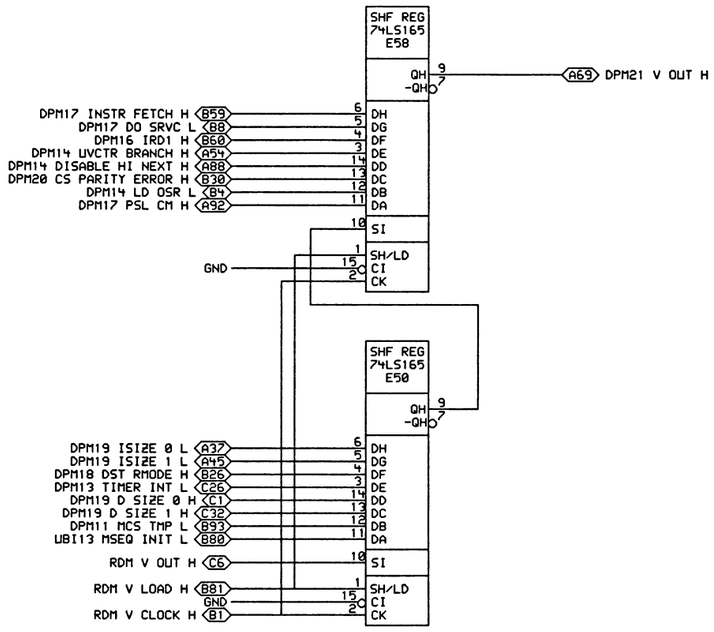
REVISIONS		
LTR	CHANGE NO.	REV

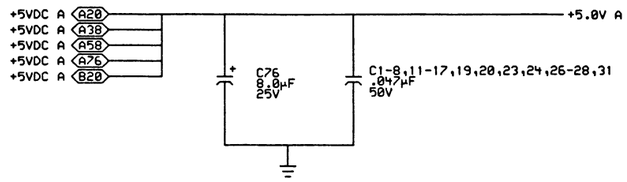
digital	DR'N.	DATE	ENG.	DATE	TITLE:	DPM19 DSIZE & ISIZE
	CHK'D.	DATE	SCALE:	LOCATION:		
(168.1271 DPM19.DWG 19-FEB-82 16:39)	NEXT HIGHER ASSEMBLY:					
FIRST USED ON OPTION MODEL: 11/250	8-DD-L0002-0-0				SIZE D	CODE CS NUMBER L0002-0-19 REV. C

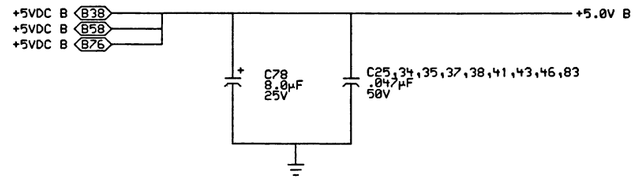
COMETCHIPS, [168.1271 DPM19.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM19.PLO[168,1271] 19-FEB-82 16:59

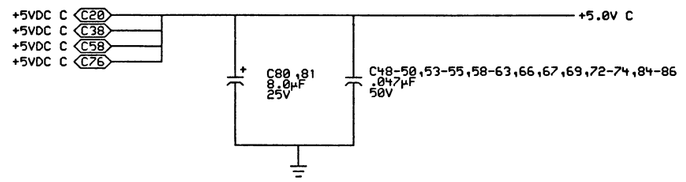

8 D FF 74S374 E14
CS LIT 1 H
CS LIT 0 H
74S32 E53
CS PAR 1 H
CS WCTRL 5 H
CS WCTRL 4 H
CS WCTRL 3 H
CS WCTRL 2 H
CS WCTRL 1 H
CS WCTRL 0 H
GND
DPM17 BUF A CLK L
OUT EN
CLK
DPM20 PAR 1 H
DPM20 LONG LIT L
DPM20 WCTRL 5 H
DPM20 WCTRL 4 H
DPM20 WCTRL 3 H
DPM20 WCTRL 2 H
DPM20 WCTRL 1 H
DPM20 WCTRL 0 H
R7 750
C82 .047MFD 100V
+5.0V
CS NNEXT PAR H
Q4 2N2369
R15 750
DPM13 +3V NOM H
DPM17 A CLK ENABLE H
DPM17 BUF B CLK L
DPM17 BASE CLOCK H
74S74 E3
DPM14 ENABLE IRD ROM H
74S10 E5
74S00 E5
DPM20 IRD ACTL 0 H
DPM17 IPD ADD CTL 1 H
74S04 E4
DPM17 IRD ADD CTL 0 H
MICRO MEM STALL H
74S04 E55
74S08 E52
DPM20 IRD CONTROL L
512X4 PROM 82S131 E15
ADR
OUT EN
DPM20 CC CTRL 3 H
DPM20 CC CTRL 2 H
DPM20 CC CTRL 1 H
DPM20 CC CTRL 0 H
DPM12 CC 1 H
DPM12 CC 0 H
DPM17 LIT 0 H
256X4 PROM 82S129 E51
ADR
AND OUT EN
DPM20 PHB GD SAM 2 H
DPM20 PHB GD SAM 1 H
DPM20 PHB GX SAM 0 H
PAR GEN 74S280 E16
EVEN
ODD
DPM20 WCTRL 5 H
DPM20 WCTRL 4 H
DPM20 WCTRL 3 H
DPM20 WCTRL 2 H
DPM20 WCTRL 1 H
DPM20 WCTRL 0 H
DPM17 ISTRM H
DPM17 LIT 1 H
DPM17 LIT 0 H
PAR GEN 74S280 E28
DPM17 MISC CTL 4 H
DPM17 MISC CTL 3 H
DPM17 MISC CTL 2 H
DPM17 MISC CTL 1 H
DPM17 MISC CTL 0 H
DPM14 NEXT 05 H
DPM14 NEXT 04 H
DPM14 NEXT 03 H
DPM14 NEXT 02 H
PAR GEN 74S280 E12
UB103 BUSF PAR H
DPM14 CLK4 H
DPM14 JSR H
DPM14 NEXT 01 H
DPM14 NEXT 00 H
DPM20 PAR 1 H
DPM13 GRP A P ERROR L
74S08 E31
DPM20 CS PARITY ERROR H
REVISIONS
CHANGE NO.
DRN.
CHK'D.
ENG.
DATE
TITLE:
DPM20
CS GRP B PARITY
BOARD LOCATION: AC2
SIZE
CODE
NUMBER
REV.
D
CS
L0002-0-20
C
FIRST USED ON OPTION/MODEL: 11/750
8-DD-L0002-0-2
NEXT HIGHER ASSEMBLY:

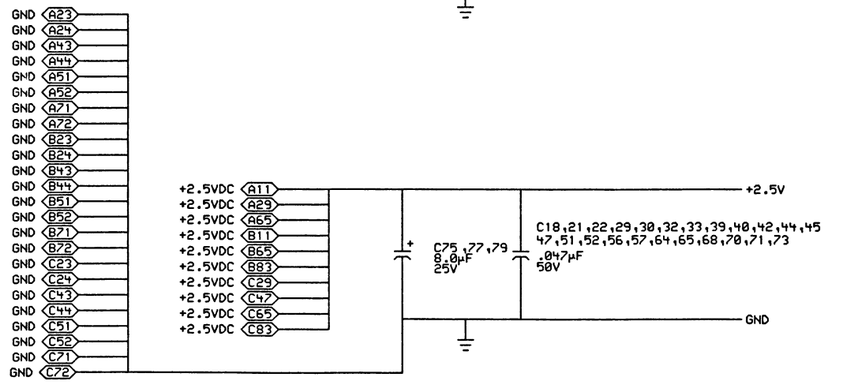
V-BUS FOR RDM











REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. M Maynard | DATE 17-MAY-83 | ENG. | DATE
CHK D. | DATE | BOARD LOCATION: AC2 | SHEET 1 OF 1

DSKD:[203,7001]DPM21.DRW|17-MAY-83 11:05 | NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL: 11/750 | B-DD-L0002-0-0

TITLE: DPM21 VISIBILITY BUS

SIZE	CODE	NUMBER	REV.
K	CS	L0002-0-21	C

SIGNAL NAME	PAGE NUMBER(S)
ALU SIO 00 L	01,10
ALU SIO 03 L	01,02
ALU SIO 07 L	03,02
ALU SIO 11 L	03,04
ALU SIO 15 L	05,04
ALU SIO 19 L	05,06
ALU SIO 23 L	07,06
ALU SIO 27 L	07,08
ALU SIO 31 L	08,10
CCS14 CPU OSC OUT H	17
CCS14 TOK OSC H	13
CLK CTRL 0 H	17
CLK CTRL 1 H	17
CS ADDR 00 H	14
CS ADDR 00 L	18,14,17,16
CS ADDR 01 H	14
CS ADDR 01 L	18,14,17,15
CS ADDR 02 H	14
CS ADDR 02 L	18,14,17,15
CS ADDR 03 H	14
CS ADDR 03 L	18,14,17
CS ADDR 04 H	14
CS ADDR 04 L	18,14,17
CS ADDR 05 H	14
CS ADDR 05 L	18,14,17
CS ADDR 06 H	18,13
CS ADDR 07 H	18,13
CS ADDR 08 H	18,13
CS ADDR 09 H	18,13
CS ADDR 10 H	18,13
CS ADDR 11 H	13
CS ADDR 12 H	13
CS ADDR 13 H	13
CS ALPCTL 0 H	12
CS ALPCTL 1 H	12
CS ALPCTL 2 H	12
CS ALPCTL 3 H	12
CS ALPCTL 4 H	12
CS ALPCTL 5 H	12
CS ALPCTL 6 H	12
CS ALPCTL 7 H	12
CS ALPCTL 8 H	12
CS ALPCTL 9 H	12
CS BUT 0 H	12
CS BUT 1 H	12
CS BUT 2 H	12
CS BUT 3 H	12
CS BUT 4 H	12
CS BUT 5 H	12
CS CC 0 H	12

SIGNAL NAME	PAGE NUMBER(S)
CS CC 1 H	12
CS CLKX H	14
CS DTYPE 0 H	12
CS DTYPE 1 H	12
CS HNEXT PAR H	20
CS ISTRM H	17
CS JSR H	14
CS LIT 0 H	17,20
CS LIT 1 H	17,20
CS MISC CTL 0 H	17
CS MISC CTL 1 H	17
CS MISC CTL 2 H	17
CS MISC CTL 3 H	17
CS MISC CTL 4 H	17
CS MSRC 0 H	13
CS MSRC 1 H	13
CS MSRC 2 H	13
CS MSRC 3 H	13
CS MSRC 4 H	13
CS NEXT 00 H	14
CS NEXT 01 H	14
CS NEXT 02 H	14
CS NEXT 03 H	14
CS NEXT 04 H	14
CS NEXT 05 H	14
CS PAR 0 H	13
CS PAR 1 H	20
CS ROT 0 H	12
CS ROT 1 H	12
CS ROT 2 H	12
CS ROT 3 H	12
CS ROT 4 H	12
CS ROT 5 H	12
CS RSRC 0 H	12
CS RSRC 1 H	12
CS RSRC 2 H	12
CS RSRC 3 H	12
CS RSRC 4 H	12
CS RSRC 5 H	12
CS SPW 0 H	13
CS SPW 1 H	13
CS WCTRL 0 H	20
CS WCTRL 1 H	20
CS WCTRL 2 H	20
CS WCTRL 3 H	20
CS WCTRL 4 H	20
CS WCTRL 5 H	20
DPM01 G(03:00) L	10,01
DPM01 P(03:00) L	10,01
DPM02 ALUV 07 H	10,02

SIGNAL NAME	PAGE NUMBER(S)
DPM02 G(07:04) L	10,02
DPM02 P(07:04) L	10,02
DPM03 EXT DATA L	03,05,06,07,08,04
DPM03 G(11:08) L	10,03
DPM03 P(11:08) L	10,03
DPM04 ALUV 15 H	10,04
DPM04 G(15:12) L	10,04
DPM04 P(15:12) L	10,04
DPM05 G(19:16) L	10,05
DPM05 P(19:16) L	10,05
DPM06 G(23:20) L	10,06
DPM06 P(23:20) L	10,06
DPM07 G(27:24) L	10,07
DPM07 P(27:24) L	10,07
DPM08 ALUV 31 H	10,08
DPM08 G(31:28) L	10,08
DPM08 P(31:28) L	10,08
DPM09 SMF 0 L	09,05,01,06,02,07,03,08,04
DPM09 SMF 1 L	09,05,01,06,02,07,03,08,04
DPM09 SRK ST0 H	16,09
DPM09 SRK ST1 H	15,09
DPM10 ALK OP 0 H	10,05,01,06,02,07,03,08,04
DPM10 ALK OP 1 H	10,05,01,06,02,07,03,08,04
DPM10 ALK OP 4 H	10,05,01,06,02,07,03,08,04
DPM10 ALK OP 5 H	10,05,01,06,02,07,03,08,04
DPM10 ALK OP 6 H	10,05,01,06,02,07,03,08,04
DPM10 ALUC 00 L	10,01
DPM10 ALUC 03 L	10,02
DPM10 ALUC 07 L	10,03
DPM10 ALUC 11 L	10,04
DPM10 ALUC 15 L	10,05
DPM10 ALUC 19 L	10,06
DPM10 ALUC 23 L	10,07
DPM10 ALUC 27 L	10,08
DPM10 ALUC 31 L	10
DPM10 ARITH TRAP L	17,10
DPM10 CCBR 0 H	16,10,15
DPM10 CCBR 1 H	15,16,10
DPM10 DOUBLE ENABLE H	10,17
DPM10 LITREG CLK H	12,10
DPM10 NON BCD H	16,10
DPM10 PSLC H	16,10
DPM10 SPWB EN H	11,10
DPM10 SPWL EN H	11,10
DPM10 SPWW EN H	11,10
DPM10 X (15:08) EN L	10,03,04
DPM11 DP PHASE H	11,05,01,06,02,07,03,08,04,09
DPM11 LITREG EN L	12,11
DPM11 MCLK H	13,14,11
DPM11 MCS TMP L	21,11,05,01,06,02,07,03,08,04

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1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS		
CHK	CHANGE NO.	REV

DRN. [illegible] DATE 21-MAR-80 | ENG. | DATE | TITLE: DPM22 FORWARD REFERENCE

CHK'D. | DATE | BOARD LOCATION: AC2 | SHEET 1 OF 1

[160,127]DPM22.DRW | 19-MAR-80 17:49 | NEXT HIGHER ASSEMBLY:

FIRST USED ON OPTION/MODEL: 11/750 | B-DD-L0002-0-0

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-22	B

COMETCHIPS, [160,127]DPM22.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM22.PLO[160,127] 26-MAR-80 11:26

SIGNAL NAME	PAGE NUMBER(S)
DPM11 MSPA 0 H	11,05,01,06,02,07,03,08,04
DPM11 MSPA 1 H	11,05,01,06,02,07,03,08,04
DPM11 MSPA 2 H	11,05,01,06,02,07,03,08,04
DPM11 MSPA 3 H	11,05,01,06,02,07,03,08,04
DPM11 RCS GPR L	11,05,01,06,02,07,03,08,04
DPM11 RCS IPR L	11,05,01,06,02,07,03,08,04
DPM11 RCS TMP L	11,05,01,06,02,07,03,08,04
DPM11 RSPA 0 H	11,05,01,06,02,07,03,08,04
DPM11 RSPA 1 H	11,05,01,06,02,07,03,08,04
DPM11 RSPA 2 H	11,05,01,06,02,07,03,08,04
DPM11 RSPA 3 H	11,05,01,06,02,07,03,08,04
DPM11 SPA ST0 H	16,11
DPM11 SPA ST1 H	15,11
DPM11 SPWK07:00) L	11,01,02
DPM11 SPWK15:08) L	11,03,04
DPM11 SPWK31:16) A L	11,05,06
DPM11 SPWK31:16) B L	11,07,08
DPM12 ALPCTL 0 H	12,10
DPM12 ALPCTL 1 H	12,10
DPM12 ALPCTL 2 H	12,10,05,01,06,02,07,03,08,04
DPM12 ALPCTL 3 H	12,10,05,01,06,02,07,03,08,04
DPM12 ALPCTL 4 H	12,10
DPM12 ALPCTL 5 H	12,10
DPM12 ALPCTL 6 H	12,10
DPM12 ALPCTL 7 H	12,10,05,01,06,02,07,03,08,04
DPM12 ALPCTL 8 H	12,10,05,01,06,02,07,03,08,04
DPM12 ALPCTL 9 H	12,10,05,01,06,02,07,03,08,04
DPM12 BUT 0 H	14,12,16,15,17
DPM12 BUT 1 H	12,16,15,14,17
DPM12 BUT 2 H	14,12,16,15,17
DPM12 BUT 3 H	16,12,17
DPM12 BUT 4 H	16,12,17
DPM12 BUT 5 H	16,12,17
DPM12 CC 0 H	20,12,09
DPM12 CC 1 H	20,12,09
DPM12 CS PAR CHK A H	13,12
DPM12 CS PAR CHK B H	12,13
DPM12 CS PAR CHK C H	12,13
DPM12 CS PAR CHK D H	13,12
DPM12 DTYPE 0 H	19,12
DPM12 DTYPE 1 H	19,12
DPM12 ROT 0 H	12,09,10
DPM12 ROT 1 H	12,09,10
DPM12 ROT 2 H	12,09,10
DPM12 ROT 3 H	12,09,10
DPM12 ROT 4 H	12,09,10
DPM12 ROT 5 H	03,09,12,10
DPM12 RSRC 0 H	12,11,09
DPM12 RSRC 1 H	12,11,09
DPM12 RSRC 2 H	12,11,09

SIGNAL NAME	PAGE NUMBER(S)
DPM12 RSRC 3 H	12,11,09
DPM12 RSRC 4 H	12,11,09
DPM12 RSRC 5 H	12,11,09
DPM13 +3V NOM H	20,19,17,03,10,01,02,09,13
DPM13 GRP A P ERROR L	20,13
DPM13 MSRC 0 H	13,11,12
DPM13 MSRC 1 H	12,13,11
DPM13 MSRC 2 H	13,11
DPM13 MSRC 3 H	13,11
DPM13 MSRC 4 H	13,11
DPM13 PAR 0 H	12,13
DPM13 SPW 0 H	11,13,10
DPM13 SPW 1 H	11,13,10
DPM13 TIMER INT L	21,13
DPM13 TIMER SERVICE H	16,17,13
DPM14 CLKX H	20,14,17
DPM14 DISABLE MI NEXT H	21,14
DPM14 ENABLE IRD ROM H	20,18,13,14
DPM14 FPA WAIT L	14,17
DPM14 JSR H	20,14
DPM14 LD OSR A L	19,14,17,18
DPM14 LD OSR L	14,21,17
DPM14 NEXT 00 H	20,14
DPM14 NEXT 01 H	20,14
DPM14 NEXT 02 H	14,20
DPM14 NEXT 03 H	14,20
DPM14 NEXT 04 H	14,20
DPM14 NEXT 05 H	14,20
DPM14 USTK ADDR 0 H	13,14
DPM14 USTK ADDR 2 H	13,14
DPM14 USTK ADDR 3 H	13,14
DPM14 USTK OUT ENABLE L	13,14
DPM14 UVCTR BRANCH H	14,21
DPM14 ZERO HI NEXT L	13,14
DPM16 BUT 1 L	14,16
DPM16 BUT CTRL CODE A H	14,16,17
DPM16 BUT UVECT L	16,14
DPM16 ENABLE BUT 4XXX L	16
DPM16 ENABLE BUT 5XXX L	16,15
DPM16 ENABLE BUT 6XXX L	16,15
DPM16 INDEX MODE BUT L	19,16
DPM16 INTERRUPT H	16,17
DPM16 IRD1 H	18,13,14,17,16,21
DPM16 IRD1 L	18,16
DPM17 B CLK L	17
DPM17 BASE CLK L	17
DPM17 BASE CLOCK H	20,17,11
DPM17 BUF B CLK L	20,14,10,13,17
DPM17 BUF M CLK L	10,20,14,17,19,12,11,13,18

SIGNAL NAME	PAGE NUMBER(S)
DPM17 CPU OSC IN H	17
DPM17 D CLK ENABLE H	17,11,10,13
DPM17 DISABLE CS ADDR H	16,17
DPM17 DKEN H	17
DPM17 DO SRVC L	21,14,17
DPM17 ENABLE UVECT H	14,17
DPM17 INSTR FETCH H	21,17,11
DPM17 IRD ADD CTL 0 H	20,17
DPM17 IRD ADD CTL 1 H	20,17,18
DPM17 IRD CTR 0 H	19,18,17
DPM17 IRD CTR 1 H	19,14,17
DPM17 IRD CTR 2 H	19,14,17
DPM17 IRD LD RNUM H	17,11
DPM17 ISTRM H	20,17,19,12,09
DPM17 LATCH UTRAP L	17
DPM17 LD IR L	17,18
DPM17 LIT 0 H	20,17,19,14,11
DPM17 LIT 1 H	20,17,14
DPM17 M CLK ENABLE H	17,20
DPM17 M CLK L	17
DPM17 MISC CTL 0 H	20,17
DPM17 MISC CTL 1 H	20,17
DPM17 MISC CTL 2 H	20,17
DPM17 MISC CTL 3 H	20,17
DPM17 MISC CTL 4 H	20,17
DPM17 MKEN H	17
DPM17 PHASE 1 H	14,13,11,17
DPM17 PHASE 1 L	17,14
DPM17 PSL CM H	19,14,18,21,17
DPM17 PSL FPD H	18,17
DPM17 PSL TP H	17,16
DPM17 QD CLK EN H	17
DPM17 QD CLK L	17,09,10,05,01,06,02,07,03,08,04
DPM17 QDEN H	17
DPM18 DISP ISIZE 0 H	19,18
DPM18 DISP ISIZE 1 H	19,18
DPM18 DST RMODE H	16,21,18,11
DPM18 IR 0 H	19,18,10,16
DPM18 IR 1 H	19,18,10
DPM18 IR 2 H	19,18,10,16
DPM18 IR 3 H	19,18,10,16
DPM18 IR 4 H	19,18,10
DPM18 IR 5 H	19,18,10,16
DPM18 IR 6 H	19,18,10
DPM18 IR 7 H	19,18,10
DPM18 IRD RNUM 0 H	18,11
DPM18 IRD RNUM 1 H	18,11
DPM18 IRD RNUM 2 H	18,11
DPM18 IRD RNUM 3 H	18,11
DPM18 PSL CM L	13,18

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REVISIONS		
CHK	CHANGE NO.	REV

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DRN. DJ 7004 DATE 21-MAR-80 | ENG. | DATE | TITLE: DPM23 FORWARD REFERENCE

CHK'D. | DATE | BOARD LOCATION: AC2 | SHEET 1 OF 1

[160,1271]DPM23.DRW 19-MAR-80 17:54 | NEXT HIGHER ASSEMBLY: B-DD-L0002-0-0

FIRST USED ON OPTION/MODEL: 11/750

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-23	B

COMETCHIPS, [160,1271]DPM23.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM23.PLO[160,1271] 26-MAR-80 11:26

SIGNAL NAME	PAGE NUMBER(S)
DPM18 REG MODE H	18
DPM18 ROM OS INH H	14,18
DPM19 D SIZE 0 H	19,21,03,18,09-11
DPM19 D SIZE 1 H	19,21,18,09,11,05,06,07,00
DPM19 DSIZE LATCH BYTE L	19,16
DPM19 DSIZE LATCH 0 (0)H	19
DPM19 DSIZE LATCH 0 (1)H	19,16
DPM19 DSIZE LATCH 1 (0)H	19
DPM19 DSIZE LATCH 1 (1)H	19,15
DPM19 FORCE DTYPE L	19
DPM19 ISIZE 0 L	19,21
DPM19 ISIZE 1 L	19,21
DPM19 LD OSR A H	14,19
DPM20 CC CTRL 0 H	20,18
DPM20 CC CTRL 1 H	20,18
DPM20 CC CTRL 2 H	20,18
DPM20 CC CTRL 3 H	20,18
DPM20 CS PARITY ERROR H	20,21,17
DPM20 IRD ACTL 0 H	20,18
DPM20 IRD CONTROL L	20,18
DPM20 LONG LIT L	16,20,19,17,18
DPM20 PAR 1 H	20
DPM20 PMB GD SAM 0 H	20,17
DPM20 PMB GD SAM 1 H	20,17
DPM20 PMB GD SAM 2 H	20,17
DPM20 WCTRL 0 H	20,13
DPM20 WCTRL 1 H	20,13
DPM20 WCTRL 2 H	20,18,13
DPM20 WCTRL 3 H	20,13
DPM20 WCTRL 4 H	20,13
DPM20 WCTRL 5 H	20,13
DPM21 V OUT H	21
FP BOOT 0 H	16
FP BOOT 1 H	15
FP START 0 H	16
FP START 1 H	15
FPA19 FPA TRAP L	17
FPA21 FPA ENABLED L	13,16,18
FPA21 FPA PRESENT L	15
FPA19 FPA STALL L	17
FPA21 FPA V L	18
FPA21 FPA Z L	18
FRNT PNL LOCK H	16
MBUS 00 L	01,09
MBUS 01 L	01,09
MBUS 02 L	01,09
MBUS 03 L	01,09
MBUS 04 L	02,09
MBUS 05 L	02,09
MBUS 06 L	02,09
MBUS 07 L	01,02,09
MBUS 08 L	03,09

SIGNAL NAME	PAGE NUMBER(S)
MBUS 09 L	03,09
MBUS 10 L	03,09
MBUS 11 L	03,09
MBUS 12 L	04,09
MBUS 13 L	04,09
MBUS 14 L	04,09
MBUS 15 L	03,04,05
MBUS 16 L	05,09
MBUS 17 L	05,09
MBUS 18 L	05,09
MBUS 19 L	05,09
MBUS 20 L	06,09
MBUS 21 L	06,09
MBUS 22 L	06,09
MBUS 23 L	06,09
MBUS 24 L	07,09
MBUS 25 L	07,09
MBUS 26 L	07,09
MBUS 27 L	07,09
MBUS 28 L	08,09
MBUS 29 L	08,09
MBUS 30 L	08,09
MBUS 31 L	09,09
MIC01 XBUF 00 H	18
MIC01 XBUF 01 H	18
MIC01 XBUF 02 H	18
MIC01 XBUF 03 H	18
MIC02 XBUF 04 H	18
MIC02 XBUF 05 H	18
MIC02 XBUF 06 H	18
MIC02 XBUF 07 H	18
MIC04 LATCHED MBUS 15 L	15
MIC04 MEM STALL H	17,20
MIC04 MSRC 10 H	19
MIC04 PROC INIT L	10,13
MIC07 GEN DEST INH L	17
MIC07 UTRAP L	17
MICRO ADDR INH L	13,14,17
MICRO VECTOR 0 H	14
MICRO VECTOR 1 H	14
MICRO VECTOR 2 H	14
MICRO VECTOR 3 H	14
Q SIO 00 L	01,10
Q SIO 03 L	01,02
Q SIO 07 L	03,10,02
Q SIO 11 L	03,04
Q SIO 15 L	05,10,04
Q SIO 19 L	05,06
Q SIO 23 L	07,06
Q SIO 27 L	07,08

SIGNAL NAME	PAGE NUMBER(S)
Q SIO 31 L	08,10
RBUS 00 L	12,01,09
RBUS 01 L	12,01,09
RBUS 02 L	12,01,09
RBUS 03 L	12,01,09
RBUS 04 L	12,02,09
RBUS 05 L	12,02,09
RBUS 06 L	12,02,09
RBUS 07 L	12,02,09
RBUS 08 L	12,03,09
RBUS 09 L	12,03,09
RBUS 10 L	12,03,09
RBUS 11 L	12,03,09
RBUS 12 L	12,04,09
RBUS 13 L	12,04,09
RBUS 14 L	12,04,09
RBUS 15 L	12,04,09
RBUS 16 L	12,05,09
RBUS 17 L	12,05,09
RBUS 18 L	12,05,09
RBUS 19 L	12,05,09
RBUS 20 L	12,06,09
RBUS 21 L	12,06,09
RBUS 22 L	12,06,09
RBUS 23 L	12,06,09
RBUS 24 L	12,07,09
RBUS 25 L	12,07,09
RBUS 26 L	12,07,09
RBUS 27 L	12,07,09
RBUS 28 L	12,08,09
RBUS 29 L	12,08,09
RBUS 30 L	12,08,09
RBUF 31 L	12,08,09
ROM V CLOCK H	21
ROM V LOAD H	21
ROM V OUT H	21
SBUS 00 H	09,01
SBUS 01 H	09,01
SBUS 02 H	09,01
SBUS 03 H	09,01
SBUS 04 H	09,01,02
SBUS 05 H	09,01,02
SBUS 06 H	09,01,02
SBUS 07 H	09,02
SBUS 08 H	02,03,09
SBUS 09 H	02,03,09
SBUS 10 H	02,03,09
SBUS 11 H	03,09
SBUS 12 H	03,04,09
SBUS 13 H	03,04,09

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1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS		
ME	CHANGE NO.	REV

DRN. | DATE 19-FEB-82 | ENG. | DATE
CHK'D. | DATE | BOARD LOCATION: 6C2

TITLE: DPM24 FORWARD REFERENCE

(160,1271)DPM24.DPL | 19-FEB-82 16:43 | NEXT HIGHER ASSEMBLY: B-DD-L0222-0-0 | FIRST USED ON OPTION/MODEL: 11/750

SIZE D | CODE CS | NUMBER L0002-0-24 | REV. D

COMETCHIPS, (163,1271)DPM24.DPL, SCALE 2, "J" RELEASE BOX
COMETCHIPS DPM24.PLC[160,1271] 19-FEB-82 16:59

SIGNAL NAME	PAGE NUMBER(S)
SBUS 14 H	03,04,09
SBUS 15 H	04,09
SBUS 16 H	05,04,09
SBUS 17 H	05,04,09
SBUS 18 H	05,04,09
SBUS 19 H	05,09
SBUS 20 H	05,06,09
SBUS 21 H	05,06,09
SBUS 22 H	05,06,09
SBUS 23 H	06,09
SBUS 24 H	06,07,09
SBUS 25 H	06,07,09
SBUS 26 H	06,07,09
SBUS 27 H	07,09
SBUS 28 H	07,08,09
SBUS 29 H	07,08,09
SBUS 30 H	07,08,09
SBUS 31 H	08,09
SBUS 32 H	08,09
SBUS 33 H	08,09
SBUS 34 H	08,09
UBI03 BUSF PAR H	20
UBI11 CON HALT L	17,15
UBI13 MSEQ INIT L	21,14,17
UBI14 INT PEND L	16,15,17
UBI14 PREV DEST INH L	16
UBI14 SYNCHR ACLO H	15
WBUS 00 H	16,17,10,09,11,13,01
WBUS 01 H	17,10,09,11,13,01
WBUS 02 H	17,10,09,11,13,01
WBUS 03 H	17,10,09,11,13,01
WBUS 04 H	17,10,09,13,02
WBUS 05 H	17,10,09,13,02
WBUS 06 H	10,09,13,02
WBUS 07 H	10,09,13,02
WBUS 08 H	13,03
WBUS 09 H	13,03
WBUS 10 H	13,03
WBUS 11 H	13,03
WBUS 12 H	13,04
WBUS 13 H	13,04
WBUS 14 H	13,04
WBUS 15 H	10,13,04
WBUS 16 H	13,05
WBUS 17 H	13,05
WBUS 18 H	13,05
WBUS 19 H	13,05
WBUS 20 H	13,06
WBUS 21 H	13,06
WBUS 22 H	13,06

SIGNAL NAME	PAGE NUMBER(S)
WBUS 23 H	13,06
WBUS 24 H	13,07
WBUS 25 H	07
WBUS 26 H	07
WBUS 27 H	17,07
WBUS 28 H	08
WBUS 29 H	08
WBUS 30 H	17,10,08
WBUS 31 H	17,10,13,08
WCS19 PRESENT L	16
WMUX2 B0 H	01,16,10,09,02
WMUX2 B1 H	03,16,10,09,04
WMUX2 B2 H	05,16,10,09,06
WMUX2 B3 H	16,10,09,07,08
XBUF 08 H	18
XBUF 09 H	18
XBUF 10 H	18
XBUF 11 H	18
XBUF 12 H	18
XBUF 13 H	18
XBUF 14 H	18
XBUF 15 H	18

SIGNAL NAME	PAGE NUMBER(S)

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1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS		
CHK	CHANGE NO.	REV

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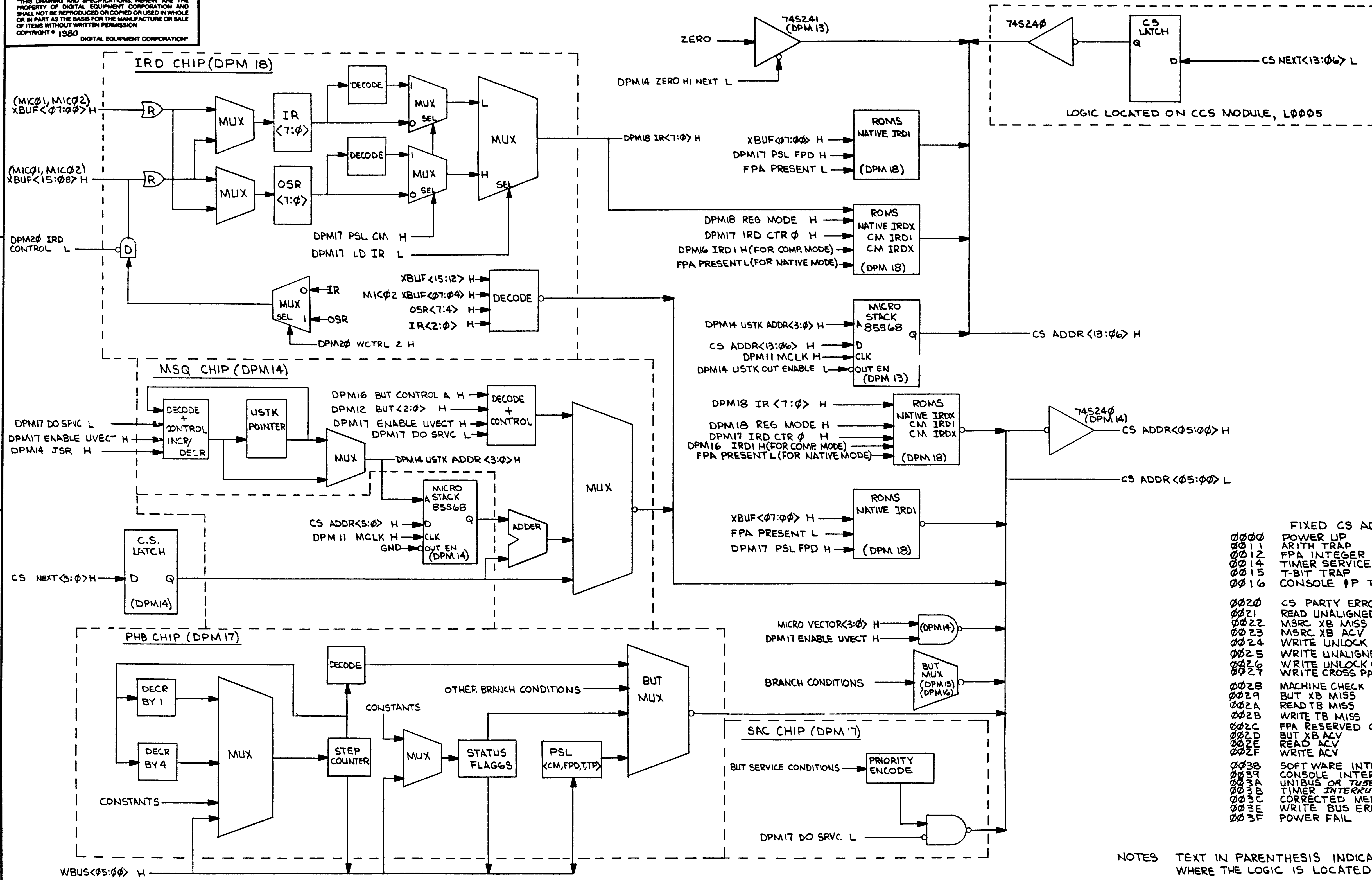
DRN. DJ Moss | DATE 21-MAR-80 | ENG. | DATE
CHK'D. | DATE | BOARD LOCATION: AC2 | SHEET 1 OF 1
[160,127]DPM25.DRW | 19-MAR-80 17:58 | NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL: 11/2?;0 | B-DD-L0002-0-0

TITLE: DPM25 FORWARD REFERENCE

SIZE	CODE	NUMBER	REV.
D	CS	L0002-0-25	B

SIZE D | CODE CS | NUMBER L0002-0-25 | REV. B

COMETCHIPS. [160,127]DPM25.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS DPM25.PLO[160,127] 26-MAR-80 11:27



FIXED CS ADDR ASSIGNMENT (HEX)

ØØØØ	POWER UP
ØØ11	ARITH TRAP
ØØ12	FPA INTEGER OV TRAP
ØØ14	TIMER SERVICE
ØØ15	T-BIT TRAP
ØØ16	CONSOLE μP TRAP
ØØ2Ø	CS PARTY ERROR
ØØ21	READ UNALIGNED DATA
ØØ22	MSRC XB MISS
ØØ23	MSRC XB ACV
ØØ24	WRITE UNLOCK UNALIGNED DATA
ØØ25	WRITE UNALIGNED DATA
ØØ26	WRITE UNLOCK CROSS PAGE BOUNDARY
ØØ27	WRITE CROSS PAGE BOUNDARY
ØØ28	MACHINE CHECK
ØØ29	BUT XB MISS
ØØ2A	READ TB MISS
ØØ2B	WRITE TB MISS
ØØ2C	FPA RESERVED OPERAND
ØØ2D	BUT XB ACV
ØØ2E	READ ACV
ØØ2F	WRITE ACV
ØØ38	SOFT WARE INTERRUPT
ØØ39	CONSOLE INTERRUPT
ØØ3A	UNIBUS OR TU58 INTERRUPT
ØØ3B	TIMER INTERRUPT
ØØ3C	CORRECTED MEMORY INTERRUPT
ØØ3E	WRITE BUS ERROR INTERRUPT
ØØ3F	POWER FAIL

NOTES TEXT IN PARENTHESIS INDICATES THE SCHEMATIC PAGE NUMBER WHERE THE LOGIC IS LOCATED.

MICRO SEQ. PORTION

DRN Brian Nouse	DATE 16 Jan 80	TITLE DPM BLOCK DIAGRAM
CHKD J. F Sullivan	DATE JAN 24 80	digital
DES. ENG. Dominic Li	DATE MAR 21, 80	
RESP ENG. Dominic Li	DATE MAR 21 80	DOCUMENT NUMBER
MFG. ENG. V Parker	DATE 3/20/80	SIZE D CODE BD NUMBER L0002-0-26 REV B
NEXT HIGHER DOC B-DD-L0002-0		SCALE — SHEET 1 OF 2

DRD 102E

TW

ARITHMETIC AND LOGIC PROCESSING ALP CHIPS EIGHT 4 BITS SLICE (DPMØ1 THRU DPMØ8)

RBUS

MBUS (ALSO DRIVEN BY MIC MODULE LØØØ3)

ROTATOR SRM CHIP FOUR 8 BIT SLICE (DPMØ9)

S BUS

W BUS

A M TEMPS IN OUT

A IPRS IN OUT

A GPRS IN OUT

A R TEMPS IN OUT

SCRATCH PAD CONTROL SPA CHIP (DPM 11)

CONDITION CODE CCC CHIP (DPM1Ø)

INTERVAL TIMER TOK CHIP (DPM13)

LONG LIT REG (DPM12)

SHORT LIT

MUX

1ST LEVEL SHIFT MUX

WMUXZ

FIND FIRST

P LATCH MUX

P LATCH

SBUS MUX

S LATCH MUX

S LATCH

2ND LEVEL SHIFT

ZERO

B MUX

W MUX

B

ALU

A

TS

A MUX

SIGN/ ZERO EXT MBUS (DPMØ3)

Q MUX

Q REG

D REG

DPM12 ALPCTL<9:Ø>H

DPM12 ROT<5:Ø>H

ALP CONTROL ALK CHIP (DPM1Ø)

DPM1Ø ALK OP<6:4,1:Ø>H

DPM12 ALPCTL<9:7,3:2>H

DATA PATH PORTION

REVISIONS	REV.	CHANGE NO.	CHK

DRN. R.W. Cameron	16 Jan 79	FIRST USED ON
CHK'D J.F.S.	24 JAN 80	digital
ENG. D. Z.	3/21/80	TITLE DPM BLOCK DIAGRAM
PROJ. ENG. D. Cane	3/21/80	
PROD. J.G. Nixon	3/20/80	
NEXT HIGHER ASSY. B-DD-L0002-0		SIZE D CODE BD NUMBER L0002-0-26 REV. B
SCALE		
SHEET 2 OF 2		DIST.

TW

ALU \ AMUX,BMUX → MICRO ORDER		0		1		2		3		4		5		6		7		8		9		A		B		C		D		E		F	
		M,R1		M,R2		M,Q1		M,Q2		M,S		XM,R		XM,Q		XM,S		D,R1		D,R2		D,Q1		D,Q2		D,S		Ø,S		R,Q		R,S	
Ø	A-B-CI	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	RESVRD	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
1	A-B-CI,BCD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	Q+T WX+P	Q+WX	Q+WX D+WX	SQR	Q+M WX+Q	Q+WX	Q+WX D+WX	Q+WX	Q+XM WX+R	Q+WX	Q+WX D+WX	Q+WX	Q+XM WX+S	Q+WX	Q+WX D+WX	SQR D+WX	B+R Q+D WX+R	Q+WX	Q+WX D+WX	SQR	Q+D WX+Q	Q+WX	Q+WX D+WX	Q+WX	Q+T WX+S	Q+WX	Q+WX D+WX	Q+WX	Q+R WX+S
2	(A-B-CI),SR	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	SQL D+WX+DSR	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	SQR D+WX+DSR	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
3	(A-B-CI),SL	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	SQL D+WX+DSL	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	SQR D+WX+DSL	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
4	A+B+CI	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	RESVRD	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
5	A+B+CI,BCD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	Q+M D+WX+R	Q+WX	Q+WX D+WX	SQR	Q+M D+WX+S	Q+WX	Q+WX D+WX	Q+WX	Q+XM D+WX+R	Q+WX	Q+WX D+WX	Q+WX	Q+XM D+WX+S	Q+WX	Q+WX D+WX	SQR D+WX	B+R Q+D D+WX+R	Q+WX	Q+WX D+WX	SQR	Q+D D+WX+Q	Q+WX	Q+WX D+WX	Q+WX	Q+T D+WX+S	Q+WX	Q+WX D+WX	Q+WX	Q+R D+WX+S
6	(A+B+CI),SR	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	RESVRD	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
7	(A+B+CI),SL	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	RESVRD	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
8	A,AND,B	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	WX+,NOT,S	WX+,NOT,S D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	RESVRD	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	WX+,NOT,S Q+WX	WX+,NOT,S Q+D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
9	A,OR,B	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	RESVRD	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
A	(A,AND,B),SR	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	REM	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D-WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	MULFAST-	MULSLOW-	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
B	(A,AND,B),SL	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	DIVFAST+	DIVSLOW+	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	DIVDS	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
C	B-A-CI	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	WX+S	WX+S D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	RESVRD	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	WX+S Q+WX	WX+S Q+D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
D	A,XOR,B	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	RESVRD	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
E	A,AND,(,NOT,B)	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	SQL D+WX	RESVRD	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	WB+LOOPF	WB+LOOPF D+B	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	MULFAST+	MULSLOW+	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	WB+LOOPF Q+B	WB+LOOPF Q+D+B	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX
F	(,NOT,A),AND,B	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	NOP	D+WX	DIVFAST-	DIVSLOW-	NOP	D+WX	SQL	SQL D+WX	NOP	D+WX	WB+ALUF	WB+ALUF D+B	NOP	D+WX	NOP	D+WX
		Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX	SQR D+WX	DIVDA	Q+WX	Q+WX D+WX	SQR	SQR D+WX	Q+WX	Q+WX D+WX	WB+ALUF Q+B	WB+ALUF Q+D+B	Q+WX	Q+WX D+WX	Q+WX	Q+WX D+WX

A=AMUX
B=BMUX
CI=CARRY IN
D=D REGISTER
DSL=D SHIFTED LEFT
DSR=D SHIFTED RIGHT
M=MBUS
Q=Q REGISTER
R=RBUS
RESVRD=RESERVED
SQL=SHIFT Q LEFT
SQR=SHIFT Q RIGHT
S=SUPER ROTATOR
WB=WBUS
WX=WMUX
XM=SIGN/ZERO EXTENDED MBUS

OUTPUT DISABLE

SPECIAL OPERATION

DQ MICRO ORDER

Ø	2
1	3

TITLE: ALPCTL FUNCTION CHART	SIZE	CODE	NUMBER	REV.
	D	BD	L0002-0-27	B
ENG.	SHEET	OF	DIST.	

SIZE	CODE	NUMBER	REV.
B	DD	LØØØ3-Ø	J

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
			PART REVISION	B C D E F H2 J2
B-DD-LØØØ3-Ø	4		MIC DRAWING DIRECTORY	B C D E F H H
E-UA-LØØØ3-Ø-Ø	2		MIC UNIT ASSEMBLY	B C D E E F H
K-PL-LØØØ3-Ø-DBP	2		MIC PARTS LIST	B C D E F H H
E-MD-5013693-Ø-Ø	6		MIC DRILL & ETCH DRAWINGS	B B C C C C C
		5013693	ETCHED BOARD	C C D D D D D
K-PC-LØØØ3-Ø-DBI			MIC PC DESIGN DATA BASE IDEA	C C D D D D D
E-EC-5013693-Ø-Ø	3		MIC ETCH CUT DRAWINGS	B B C D D E F
K-CS-LØØØ3-Ø-DBS			MIC DESIGN DATA BASE SUDS	B C D E F H J
D-CS-LØØØ3-Ø-1	1	*	DATA ROUTING & ALIGNMENT SHT 1	B B B B B B B
D-CS-LØØØ3-Ø-2	1	*	DATA ROUTING & ALIGNMENT SHT 2	B B B B B B B
D-CS-LØØØ3-Ø-3	1	*	MEMORY ADDRESS	B B B B B B B
D-CS-LØØØ3-Ø-4	1	*	MISC. CONTROL	B B B B B B B
D-CS-LØØØ3-Ø-5	1	*	MEMORY INTERFACE CS LATCHES	B B B B B B B
D-CS-LØØØ3-Ø-6	1	*	MEMORY INTERFACE CONTROL SHT 1	B B B B B B B
D-CS-LØØØ3-Ø-7	1	*	MEMORY INTERFACE CONTROL SHT 2	B C C C D E F
D-CS-LØØØ3-Ø-8	1	*	CACHE TAG STORE	B B B B B B B
D-CS-LØØØ3-Ø-9	1	*	CACHE DATA STORE BYTES 3 & 2	B B B B B B B
D-CS-LØØØ3-Ø-10	1	*	CACHE DATA STORE BYTES 1 & Ø	B B B B B B B
D-CS-LØØØ3-Ø-11	1	*	CACHE CONTROL	B B B B B C D
D-CS-LØØØ3-Ø-12	1	*	CACHE TAG PARITY	B B B B B B B
D-CS-LØØØ3-Ø-13	1	*	CACHE TAG PARITY	B B B B B C C
D-CS-LØØØ3-Ø-14	1	*	TB TAG	B B B B B B B
D-CS-LØØØ3-Ø-15	1	*	TB DATA STORE	B B B B B B B
D-CS-LØØØ3-Ø-16	1	*	TB CONTROL	B B C C C D D

NOTES:

* CONTROL SOURCE IS THE SUDS DATA BASE
NO CONTROLLED PAPER ORIGINALS EXIST

ALL DOCUMENTATION WAS RELEASED AT REVISION 'B'

REVISIONS							
REV.		C	D	E	F	H	J
CHG NO.		TWØØ1	TWØØ2	TWØØ3	TWØØ4	TWØØ5	TWØØ6
DATE		12-80	11-81	10-82	12-83	6-84	10/84

digital

USED ON OPTION/MODEL
11/750

DRN.	J. CASEY
CHK'D	J. CASEY
ENG.	P. PINDER
PROD.	V. PARKER

TITLE: MIC

SIZE	CODE	NUMBER	REV.
B	DD	LØØØ3-Ø	J

SHEET 1 OF 4

DRB 126

SIZE	CODE	NUMBER	REV.
B	DD	L0003-0	J

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
D-CS-L0003-0-17	1	*	TB PARITY	B B B B B B B
D-CS-L0003-0-18	1	*	MISC CONTROL & DECOUPLING	B C D E E F F
D-CS-L0003-0-19	1	*	FORWARD REFERENCE	B C C C C C C
D-CS-L0003-0-20	1	*	FORWARD REFERENCE	B C C C C D E
D-CS-L0003-0-21	1	*	FORWARD REFERENCE	B B B B B C C
D-CS-L0003-0-22	1	*	FORWARD REFERENCE	B C C C C D D
D-BD-L0003-0-23	1	*	MIC BLOCK DIAGRAM	B C C C C C C

NOTES:

* CONTROL SOURCE IS THE SUDS DATA BASE
NO CONTROLLED PAPER ORIGINALS EXIST

ALL DOCUMENTATION WAS RELEASED AT REVISION 'B'

REVISIONS	REV.	CHG NO.	DATE
	C	TW001	12-80
	D	TW002	11-81
	E	TW003	10-82
	F	TW004	12-83
	H	TW005	6-84
	J	TW006	10/84

digital

USED ON OPTION/MODEL
11/750

DRN. J. CASEY
CHK'D J. CASEY
ENG. P. BINDER
PROD. V. PARKER

TITLE
MIC

SIZE	CODE	NUMBER	REV.
B	DD	L0003-0	J

SHEET 2 OF 4

DRB 126

SIZE	CODE	NUMBER	REV.
B	DD	L0003-0	J

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
			PART REVISION	- - - B B H1 J1
E-UA-L0003-0-0	2		MIC UNIT ASSEMBLY	- - - C1 C1 C2 C3
E-EC-5013693-0-0	3		MIC ETCH CUT DRAWING	- - - B1 B1 B2 B3
K-CS-L0003-0-DBS			MIC DESIGN DATA BASE SUDS	- - - C1 C2 C2 C2
K-CS-L0003-0-1	1	*	DATA ROUTING & ALIGNMENT SHT 1	- - - B1 C1 C1 C1
K-CS-L0003-0-2	1	*	DATA ROUTING & ALIGNMENT SHT 2	- - - B1 C1 C1 C1
K-CS-L0003-0-3	1	*	MEMORY ADDRESS	- - - B1 C1 C1 C1
K-CS-L0003-0-4	1	*	MISC. CONTROL	- - - B1 C1 C1 C1
K-CS-L0003-0-5	1	*	MEMORY INTERFACE CS LATCHES	- - - B1 C1 C1 C1
K-CS-L0003-0-6	1	*	MEMORY INTERFACE CONTROL SHT 1	- - - B1 C1 C1 C1
K-CS-L0003-0-7	1	*	MEMORY INTERFACE CONTROL SHT 2	- - - C1 C2 C2 C2
K-CS-L0003-0-8	1	*	CACHE TAG STORE	- - - B1 C1 C1 C1
K-CS-L0003-0-9	1	*	CACHE DATA STORE BYTES 3& 2	- - - B1 C1 C1 C1
K-CS-L0003-0-10	1	*	CACHE DATA STORE BYTES 1& Ø	- - - B1 C1 C1 C1
K-CS-L0003-0-11	1	*	CACHE CONTROL	- - - B1 C1 C1 C1
K-CS-L0003-0-12	1	*	CACHE TAG PARITY	- - - B1 C1 C1 C1
K-CS-L0003-0-13	1	*	CACHE TAG PARITY	- - - B1 C1 C1 C1
K-CS-L0003-0-14	1	*	TB TAG	- - - B1 C1 C1 C1
K-CS-L0003-0-15	1	*	TB DATA STORE	- - - B1 C1 C1 C1
K-CS-L0003-0-16	1	*	TB CONTROL	- - - B1 C1 C1 C1
K-CS-L0003-0-17	1	*	TB PARITY	- - - B1 C1 C1 C1
K-CS-L0003-0-18	1	*	MISC CONTROL & DECOUPLING	- - - C1 C1 C1 C1
K-CS-L0003-0-19	1	*	FORWARD REFERENCE	- - - C1 C1 C1 C1
K-CS-L0003-0-20	1	*	FORWARD REFERENCE	- - - C1 C1 C1 C1
K-CS-L0003-0-21	1	*	FORWARD REFERENCE	- - - B1 C1 C1 C1

NOTES:

REVISIONS	REV.	CHG NO.	DATE
	E	TW003	4-7-84
	F	TW004	4-9-84
	H	TW005	6-84
	J	TW006	10/84

digital

USED ON OPTION/MODEL	
11/750	

DRN.
CHK'D
ENG.
PROD.

TITLE: MIC

SIZE	CODE	NUMBER	REV.
B	DD	L0003-0	J

SHEET 3 OF 4

TW

DRB 126

SIZE	CODE	NUMBER	REV.
B	DD	L0003-0	J

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
K-CS-L0003-0-22	1	*	FORWARD REFERENCE	- - - C1 C1 C1 C1
K-BD-L0003-0-23	1	*	MIC BLOCK DIAGRAM	- - - C1 C1 C1 C1

NOTES:

REVISIONS	REV.	CHG NO.	DATE
	H	TW005	6-84
	J	TW006	10/84

digital

USED ON OPTION/MODEL: 11/750

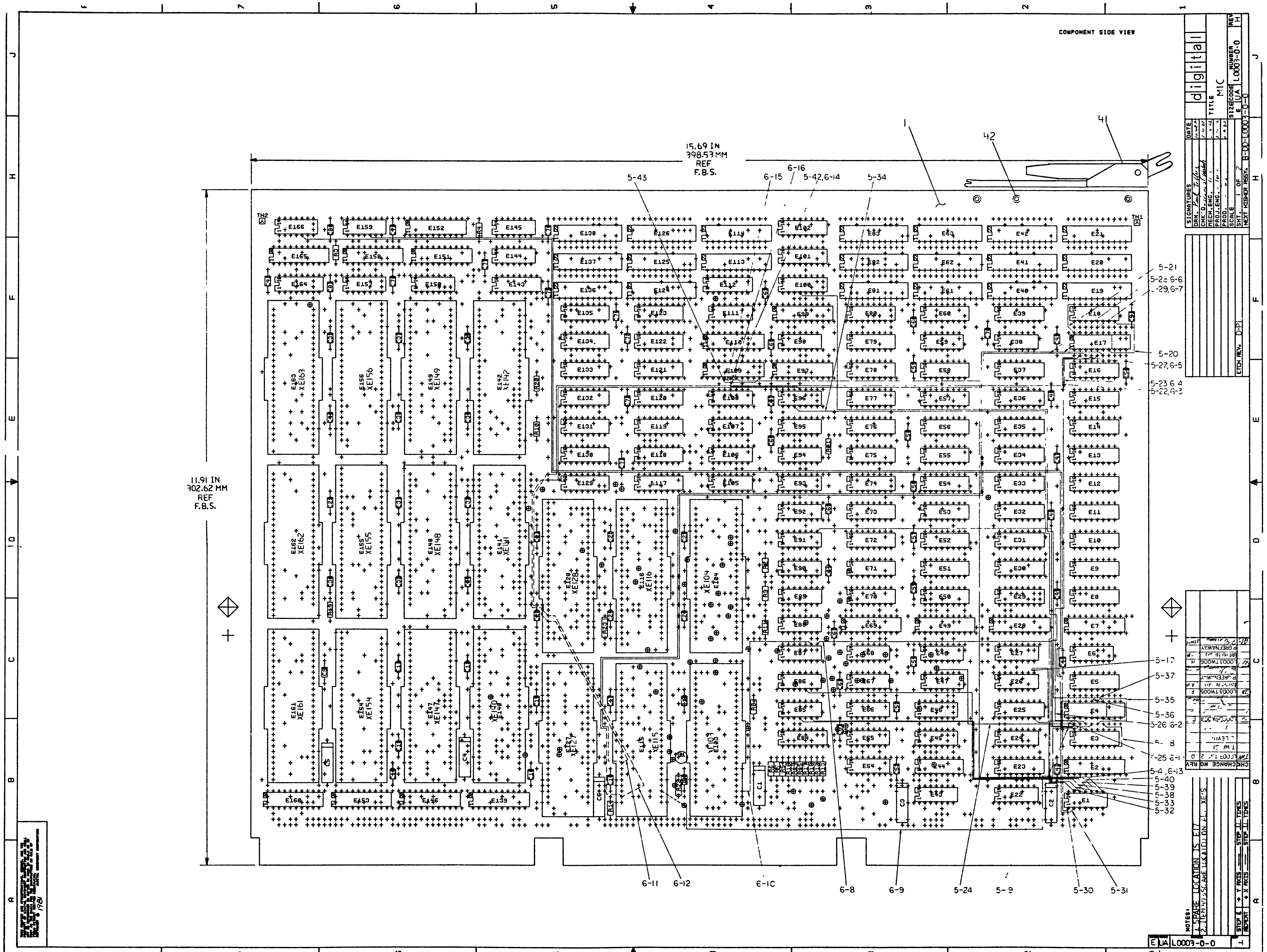
DRN. | CHK'D | ENG. | PROD.

TITLE: MIC

SIZE	CODE	NUMBER	REV.
B	DD	L0003-0	J

SHEET 4 OF 4

DRB 126



COMPONENT SIDE VIEW
15.69 IN
398.53 MM
REF
F.B.S.
11.91 IN
302.62 MM
REF
F.B.S.
digital
TITLE
MIC
SIZE E
CODE UA
NUMBER L0003-0-0
REV H
SIGNATURES
DRN.
CHK'D.
MECH.ENG.
PROJ.ENG.
PROD.
SCALE
SHT. 1 OF 2
NEXT HIGHER ASSY. B-DD-L0003-0-0
ETCH REV. D-P1
CHK CHANGE NO REV
NOTES:
1. SPARE LOCATION IS E17
STEP & REPEAT
Y AXIS STEP TIMES
X AXIS STEP TIMES
E UA L0003-0-0

ECO NO.3
COMPONENT ADDS SIDE 1

3-2 74S74,19-10544-00, IN LOCATION E4 SHIFTED LEFT

WIRE ADDS SIDE 1:

3-3 E25-6 TO E1-1
3-4 E1-1 TO E1-2
3-5 E1-12 TO E26-9
3-6 E1-13 TO E4-6
3-7 E4-4 TO E4-8
3-8 E86-11 TO E4-3
3-9 E4-11 TO E4-2
3-10 E4-2 TO E4-7
3-11 E4-7 TO E3-8
3-12 E4-13 TO E25-9
3-13 E4-10 TO E87-1
3-14 E4-1 TO E3-1
3-15 E4-14 TO E3-16

REWORK INSTRUCTIONS PER ECO *5

COMPONENT DELETES SIDE 1
5-1 DELETE A 74S74(1910544-00) AT LOCATION E4

WIRE DELETES SIDE 1
5-2 E25-6 TO E1-1
5-3 E1-1 TO E1-2
5-4 E1-12 TO E26-9
5-5 E1-13 TO E4-6
5-6 E4-4 TO E4-8
5-7 E86-11 TO E4-3
5-8 E4-11 TO E4-2
5-9 E4-2 TO E4-7
5-10 E4-7 TO E3-8
5-11 E4-13 TO E25-9
5-12 E4-10 TO E87-1
5-13 E4-1 TO E3-1
5-14 E4-14 TO E3-16

COMPONENT ADDS SIDE 1
5-15 ADD A 74S00(1910532-00) AT LOCATION E4
5-16 ADD A 74S32(1913340-00) AT LOCATION E17

WIRE ADDS SIDE 1
5-17 E25-7 TO E26-9
5-18 E3-8 TO E4-7
5-19 E3-16 TO E4-14
5-20 E17-7 TO E18-8
5-21 E17-14 TO E18-16
5-22 E17-1 SIDE 1 TO E128-20, SIDE 2
NOTE: FEED WIRE FROM E17-1 THROUGH DESOLDERED PTH, (PTH LOCATION [FROM SIDE 1] SECOND PTH TO THE LEFT OF E129-16) TO E128-20, SIDE 2
5-23 E17-5 SIDE 1 TO E128-21, SIDE 2
NOTE: FEED WIRE FROM E17-5 THROUGH DESOLDERED PTH, (PTH LOCATION [FROM SIDE 1] DIRECTLY BELOW PTH MENTIONED IN 5-22) TO E128-21, SIDE 2
5-24 E47-12 TO E4-1
5-25 E4-1 TO E4-2
5-26 E4-3 TO E17-2
5-27 E17-2 TO E17-4
5-28 E17-3, SIDE 1 TO E115-23, SIDE 2
NOTE: FEED WIRE FROM E17-3 THROUGH DESOLDERED PTH, (PTH LOCATION [FROM SIDE 1] FIRST PTH TO THE LEFT OF E115-10), TO E115-23, SIDE 2
5-29 E17-6, SIDE 1 TO E115-17, SIDE 2
NOTE: FEED WIRE FROM E17-6 THROUGH DESOLDERED PTH, (PTH LOCATION [FROM SIDE 1] FIRST PTH TO THE LEFT OF E115-9), TO E115-17, SIDE 2
5-30 E166-5 TO E1-1
5-31 E159-5 TO E1-2
5-32 E91-8 TO E1-13
5-33 E1-12 TO E4-4
5-34 E96-3 TO E4-5
5-35 E4-6 TO E4-9
5-36 E4-9 TO E4-10
5-37 E4-8 TO E100-4
5-38 E86-5 TO E1-11
5-39 E85-6 TO E1-10
5-40 E85-4 TO E1-9
5-41 E1-8 TO E109-6
5-42 E96-11 TO E109-5
5-43 E109-10 TO E109-4

REWORK INSTRUCTIONS PER ECO *6

WIRE DELETES
6-1 E4-1 TO E4-2
6-2 E4 3 TO E17-2
6-3 E17-1 TO E128-20
6-4 E17-5 TO E128-21
6-5 E17-2 TO E17-4
6-6 E17-3 TO E115-23
6-7 E17-6 TO E115-17
6-13 E1-8 TO E109-6
6-14 E96-11 TO E109-5

WIRE ADDS SIDE 1
6-8 E87-8 TO E4-2
6-9 E115-27 TO E4-3 (THIS WIRE STARTS ON SIDE 2 AND COMES UP THROUGH A PTH TO SIDE 1. SEE UA DRAWING)
6-10 E87-9 TO THE PTH RIGHT OF E103-27
6-15 E109-4 TO E109-5
6-16 E109-5 TO E109-6

WIRE ADDS SIDE 2
6-11 E128-21 TO E115-17
6-12 E128-20 TO E115-23

REVISION HISTORY | ECO NUMBER | REV

TITLE: MIC

DOCUMENT NUMBER: E UA L0003-0-0 REV H
SCALE —/— SHEET 2 OF 2

AUTOMATED BY PRTLST.4Q(50) — P A R T S L I S T — SHEET A1 OF A2

LINE	ITEM	TOP DOCUMENT	PART NUMBER	MIN REV	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
					VARIATION REVISION LEVEL:		
1	1	E-MD-5013693-0-0	5013693-00		DRILL & ETCH DRAWING	1	
2	2		1012784-00		.047 MFD 50V +80-20% CER	69	C9-C13,C15-C26,C29-C41,C43-C81
3	3	SEE NOTES	1012084-01		8 MFD 25V +75-10% AL EL	6	C1-C6
4	4		1313580-00		360.0 .25 W 5.0 % CF	18	R1-R18
5	5		1910532-00		74S00 NAND GATE-QUAD 2IN	2	E4,E65
6	6		1910534-00		74S04 INVERTER GATE-HEX 1I	2	E85,E87
7	7		1910536-00		74S10 NAND GATE-TRIPLE 3IN	1	E91
8	8		1910542-00		74S64 A-O-I GATE 4-2-3-2	3	E24,E47,E89
9	9		1910547-00		74S153 MUX 1 OF 4 (DUAL)	3	E100-E102
10	10		1910549-00		74S158 MUX 1 OF 2 (QUAD)	2	E5,E79
11	11		1910541-00		74S40 BUFFER,POS-NAND,DUAL	1	E38
12	12		1910957-00		74S175 FF-D QUAD COMMON CLO	3	E3,E23,E25
13	13		1911573-00		74S280 PARITY GEN/CHKR,9BIT	17	E6,E27,E48,E59,E68,E98,
							CONT E105-E108,E111,E144,E145,E150,
							CONT E157,E159,E166
14	14		1911641-00	SN	74S257 MUX,QUAD 2 TO 1	4	E18,E39,E60,E80
15	15		1911712-00		74S51 AND-OR GATE-INVERT D	2	E26,E92
16	16		1916310-00		RAM,256X1,TRI STATE	2	E112,E143
17	17		1912096-00	DEC	74S86 XOR GATE,QUAD 2IN	1	E96
18	18		1912097-00	SN	74S182 LOOK AHD CARRY GEN	1	E164
19	19		1912388-00		74S02 NOR GATE-QUAD 2IN,PO	1	E88
20	20		1912389-00		74S08 AND GATE-QUAD 2IN,PO	1	E90
21	21		1912746-00	DEC	74S37 NAND GATE-QUAD 2IN	2	E94,E95
22	22		1913340-00		74S32 OR GATE-QUAD 2IN	3	E17,E22,E93
23	23		1913493-00		74S241 OCTAL BUFFER,TRI-STA	5	E7,E28,E49,E69,E97
24	24		1913662-00		RAM 1KX1 16 PIN TT	50	E8-E16,E29-E37,E50-E58,E70-E78,
							CONT E117-E123,E129-E135
25	25		1913671-00		74S374 FF-D,OCTAL,TR1 STATE	5	E2,E139,E146,E153,E160
26	26		1913839-00		LS165 SHIFT REG.,8BIT	2	E44,E84
27	27		1913888-00	DC	102A EQUALS CHECKER 8BIT	6	E109,E110,E151,E152,E158,E165

REVISION HISTORY		
ENG	ECO NUMBER	REV
---	INITIAL	B
D.L	L0003-TW001	C
L.L	L0003-TW02A	D
JS	L0003-TW003	E
SB	L0003-TW004	F
PG	L0003-TW005	H

BASIC PART NO: L0003

SECTION A OF A

SECTION.VARIATION INDEX
[A] 00
[B]
[C]
[D]
[E]
[F]
[H]
[J]
[K]
[L]
[M]
[N]

DRN: D.SIREEN — DATE: 31-MAY-79

CHK'D: F.GAROFALO — DATE: 31-MAY-79

DES.ENG: P.BINDER — DATE: 31-MAY-79

RESP.ENG.: P.BINDER — DATE: 31-MAY-79

MFG.ENG.: VANCE PARKER — DATE: 8-FEB-80

ASSEMBLY NUMBER: E-UA-L0003-0-0

TOP DOCUMENT NUMBER: B-DD-L0003-0-0

FILE NAME: Z1258H.PLS — EDIT #: 7

D I G I T A L

TITLE PARTS LIST
MIC

DOCUMENT NUMBER

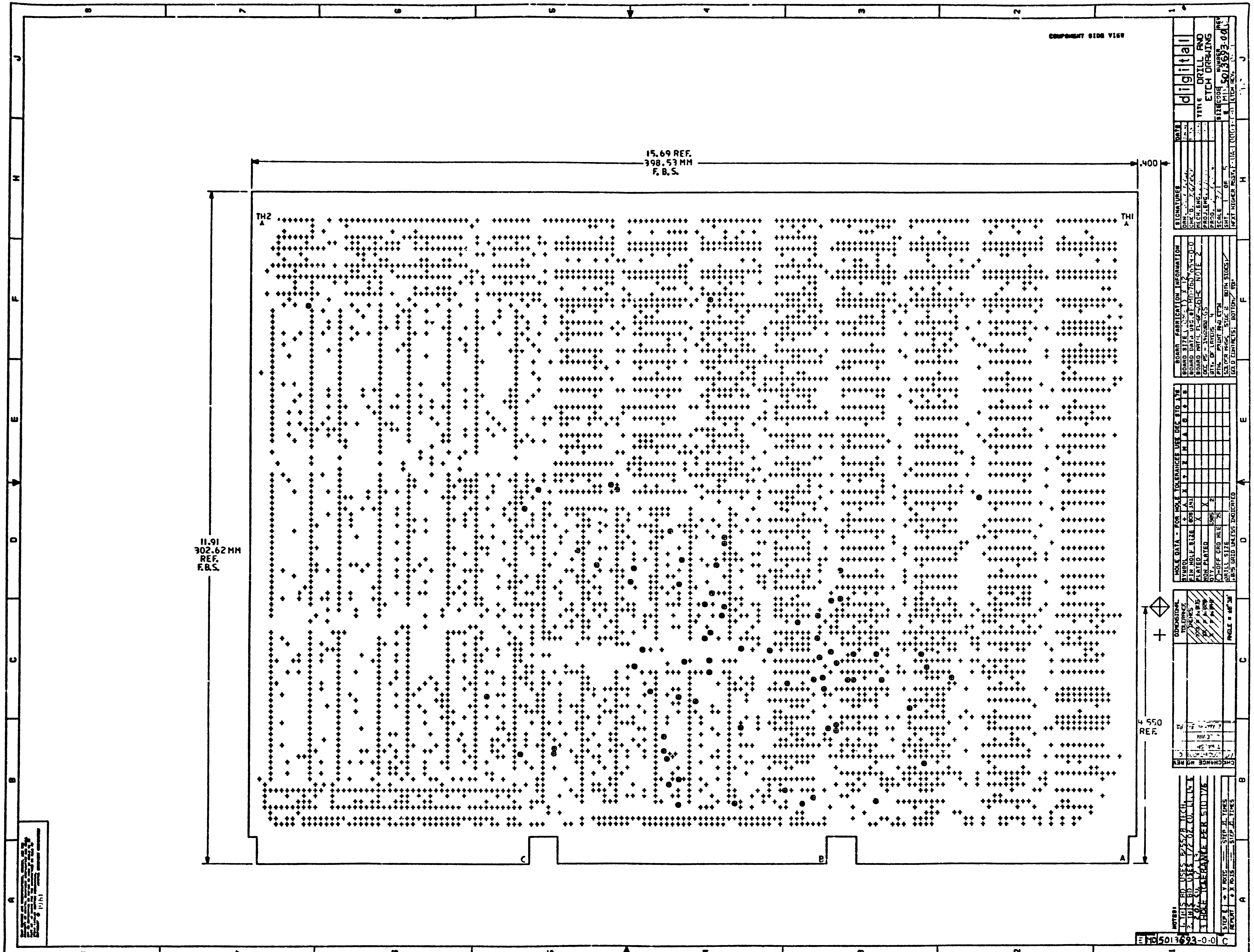
SIZE	CODE	NUMBER	REV
K	PL	L0003-0-DBP	H

RELEASE DATE: 18-SEP-84

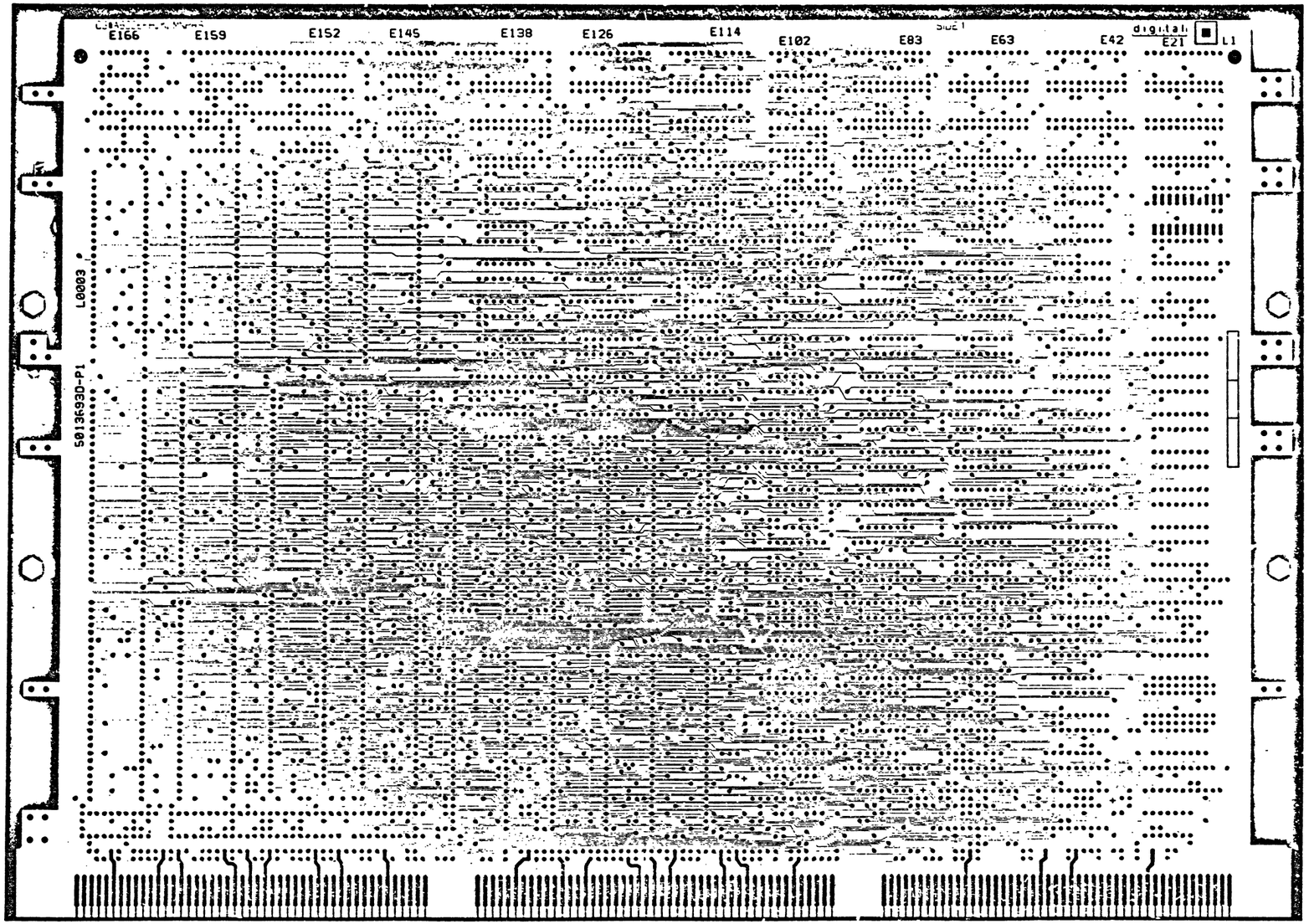
LINE	ITEM	TOP DOCUMENT	PART NUMBER	MIN REV	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
					VARIATION REVISION LEVEL:		
28	28		1914085-00		74S260 NOR GATE-DUAL,POS	3	E45,E67,E86
29	29		1914086-00		74S30 NAND GATE-POS 8IN	1	E64
30	30		1914681-00	DC	607B BIPOLAR,LS,400-GATE	8	E140,E141,E147,E148,E154,E155,
						CONT	E161,E162
31	31		1914683-00	DC	609E BIPOLAR,LS,400-GATE	4	E142,E149,E156,E163
32	32		1914725-00	DC	651 BIPOLAR,LS,400-GATE	1	E103
33	33		1914698-00	DC	624E BIPOLAR,LS,400-GATE	1	E128
34	34		1914699-00	DC	625B BIPOLAR,LS,400-GATE	1	E127
35	35		1914700-00	DC	626B BIPOLAR,LS,400-GATE	1	E116
36	36		1914701-00	DC	627B BIPOLAR,LS,400-GATE	1	E104
37	37		1914702-00	DC	628B BIPOLAR,LS,400-GATE	1	E115
38	38		1915193-00		LS244 DRIVER,LINE,OCTAL,T	1	E99
39	39		1915697-00		RAM 256X4 TRI-STATE	20	E19-E21,E40-E42,E61-E63,E81-E83,
						CONT	E113,E114,E124-E126,E136-E138
40	40		1910537-00		74S11 AND GATE-TRIPLE 3INP	1	E66
41	41		1210711-02		/REPLACED BY 12-16988-02	1	
42	42		9000024-01		EYELET,ROLLED 0.1210DX0.192	12	
43	43		1503121-00		2N 2369 NPN 350MW SI N	1	Q1
44	44		1302379-00		75.0 .25 W 5.0 % CF	4	R19-R21,R23
45	45		9009185-00		JUMPER, WIRE, INSULATED, BLACK B	1	R22
46	46		1910544-00		74S74 FF-D DUAL,EDGE TRIGG	1	E46
47	47		1910878-00		7427 NOR GATE-TRIPLE 3IN	2	E43,E1
48	48		1215924-00		SKT,IC 48PIN DIP GOLD FOR	18	XE103,XE104,XE115,XE116,XE127,
						CONT	XE128,XE140-XE142,XE147-XE149,
						CONT	XE154-XE156,XE161-XE163
49	49		1215935-00		GASKET,THERMAL SILICONE	18	
50	50		1215936-00		HEAT SINK, 2.200X.585	18	
51	51		9009898-00		TRANSIPAD, 4 HOLE	1	XQ1

52 NOTE: SPARE I.C. LOCATION E17.
53 NOTE: SOME MODULES WILL HAVE 10-05306 INSTEAD OF 10-12084-01

DIGITAL	TITLE: MIC	SECTION A OF A	SIZE: K	CODE: PL	DOCUMENT NUMBER: L0003-0-DBP	REV: H


COMPONENT SIDE VIEW
15.69 REF.
398.53 MM
F.B.S.
.400
11.91
302.62 MM
REF.
F.B.S.
TH2
TH1
4.550
REF.
digital
DRILL AND
ETCH DRAWING
MD 5013693-0-0 C

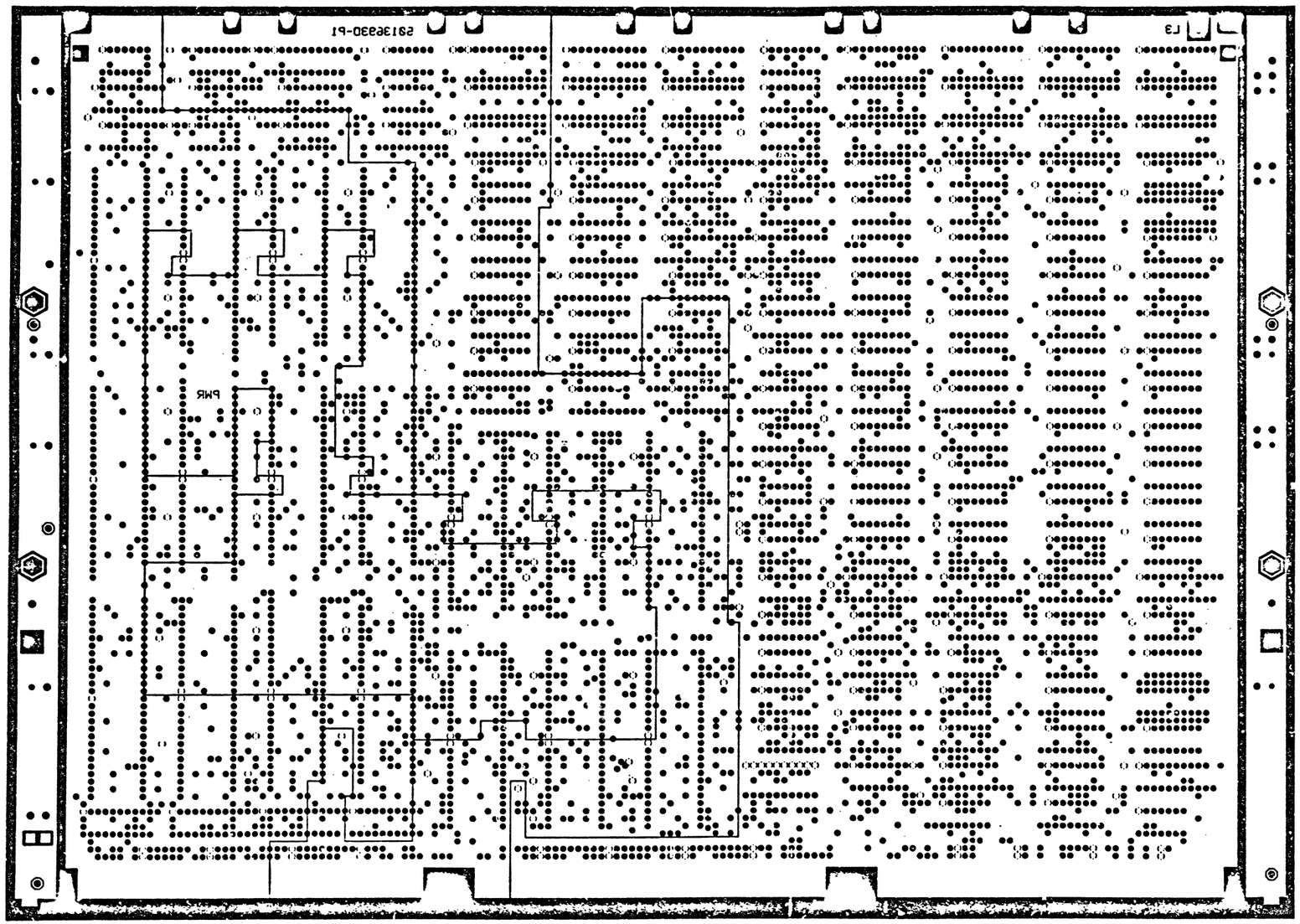
LAYER 1


E166
E159
E152
E145
E138
E126
E114
E102
E83
E63
E42
E21
L1
digital
L0003
5013693D-P1

DRILL & ETCH DRAWING

5013693-C-C

LAYER 3



TITLE DRILL & ETCH DRAWINGS

EMD 5013699-0-0 C

SHEET 3 OF 5

LAYER 4

J4

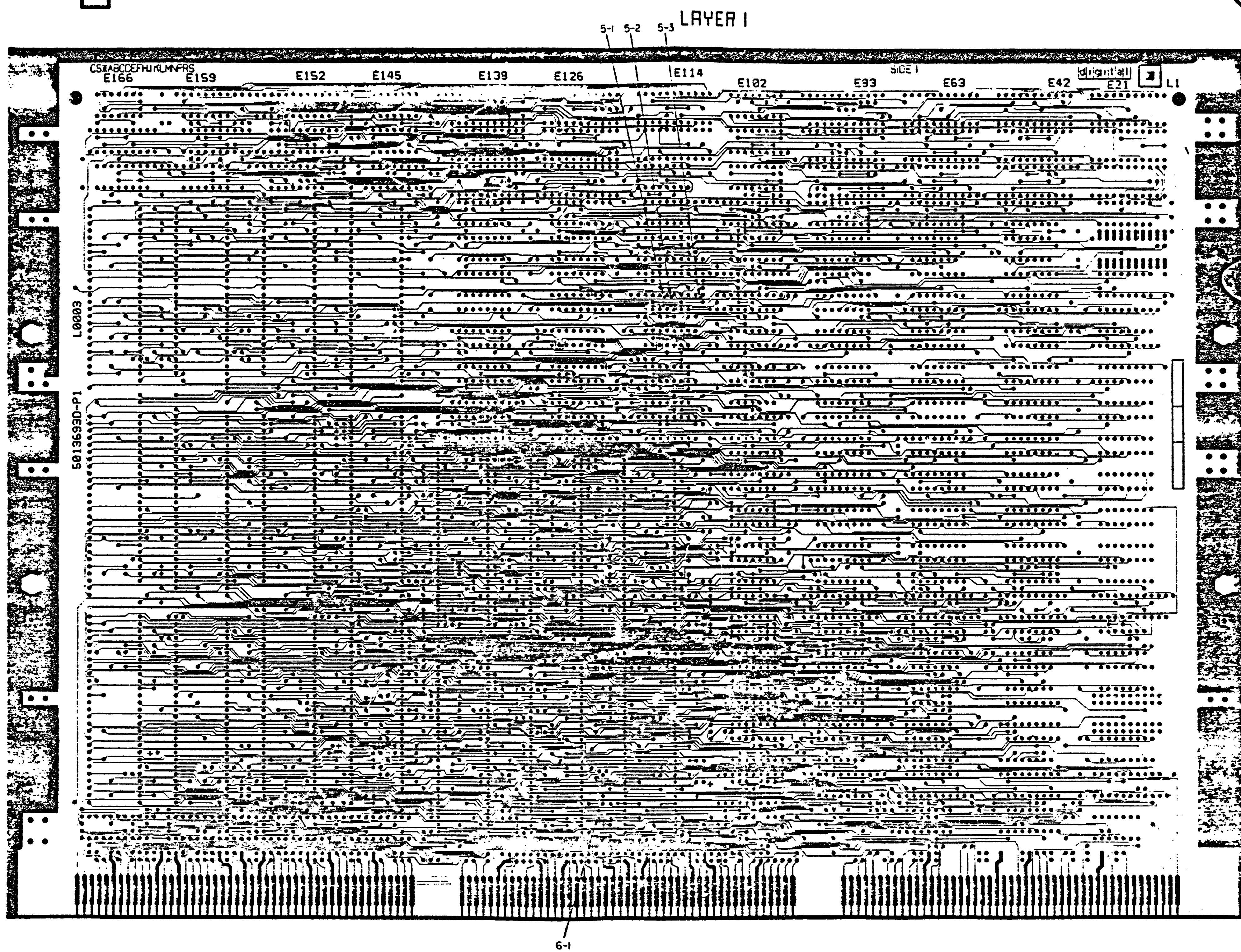
MIC

SIDE 2

2013230-01

TITLE DRILL & ETCH DRAWING

EMC 5013693-0-C C



REVISION HISTORY

DATE	ECO NUMBER	REV
	L0003-TW0C	C

L0003-TW003 D	L0003-TW005 E	L0003-TW006 F	
J. STARK	PAUL GREENAWAY	PAUL GREENAWAY	

TITLE MIC

DOCUMENT NUMBER			
E	EC	5013693-0-0	F
SCALE 2/1	SHEET 3 OF 3		

TW

LAYER 4

L4

MIC SIDE 2 5013693O-P1

9-5

3-1

6-2 5-5 5-4

TITLE MIC

EEC 5013693-0-0 F

REWORK INSTRUCTIONS

ECO #3

ETCH CUT SIDE 2:
3-1 AT E26-9

REWORK INSTRUCTIONS PER ECO #5

ETCH CUTS SIDE 1
5-1 AT E103, BETWEEN PIN 4 AND PIN 5
5-2 AT E109, BETWEEN PIN 5 AND PIN 6
5-3 AT E109, BETWEEN PIN 6 AND PIN 10

ETCH CUTS SIDE 2
5-4 AT PTH TO THE LEFT OF E128-20
NOTE WITH GOLD FINGERS AT BOTTOM
5-5 AT PTH TO THE LEFT OF E128-21
NOTE: WITH GOLD FINGERS AT BOTTOM
5-6 AT E100, BETWEEN PIN 4 AND PTH

REWORK INSTRUCTIONS PER ECO #6

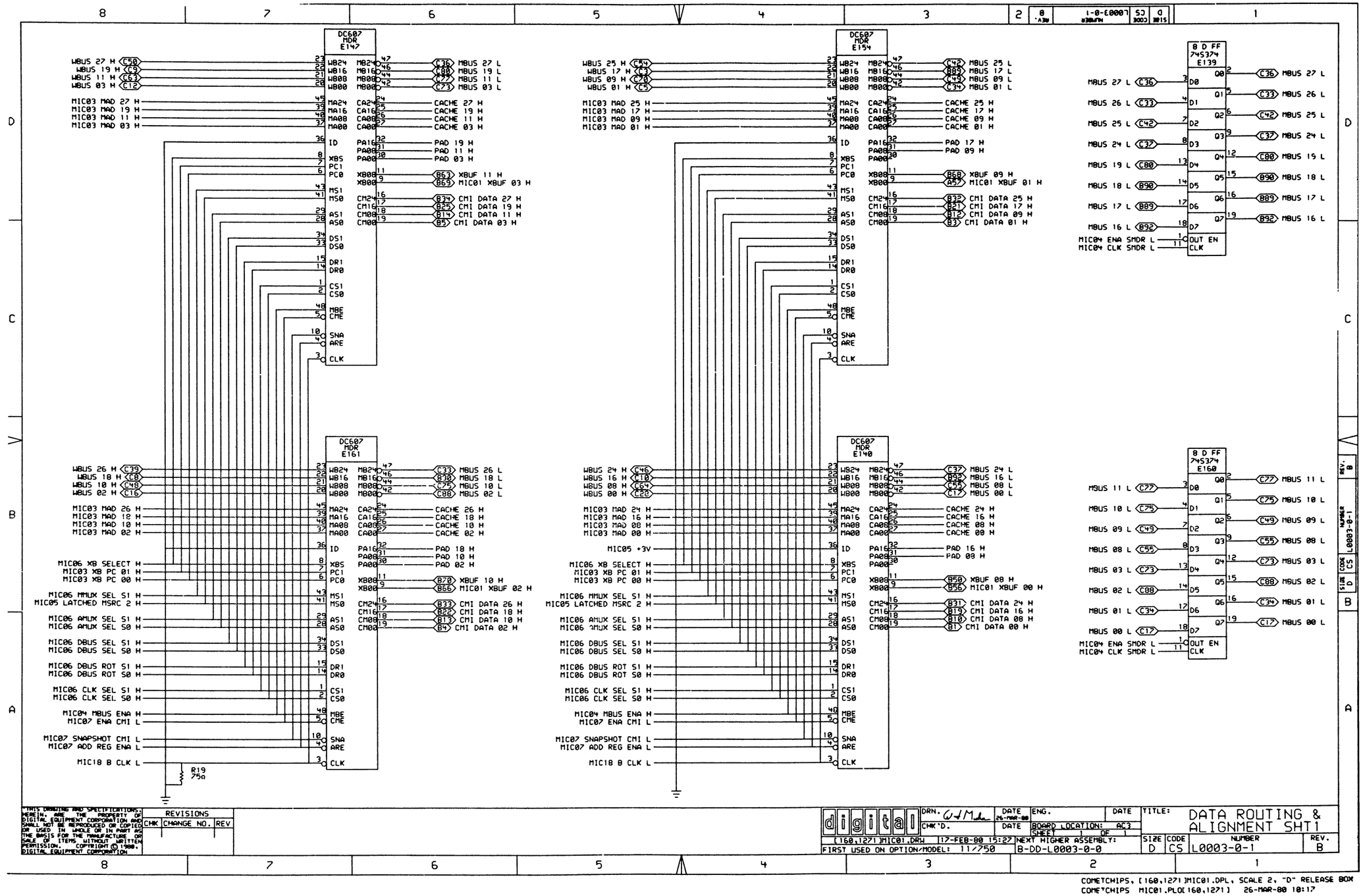
ETCH CUTS SIDE 1
6-1 AT THE ETCH TO THE RIGHT OF E115-27

ETCH CUTS SIDE 2
6-2 AT THE PTH TO THE LEFT OF E127-27

REVISION HISTORY
DATE | ECO NUMBER | REV

TITLE MIC

DOCUMENT NUMBER
EEC 5013693-0-2 F
SCALE — SHEET 3 OF 3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WBUS 19 H C9
WBUS 11 H C63
WBUS 03 H C12
MIC03 MAD 27 H
MIC03 MAD 19 H
MIC03 MAD 11 H
MIC03 MAD 03 H
WB24 WB16 WB08 WB00
MA24 MA16 MA08 MA00
ID XBS PC1 PC0 XB00 XB00 MS1 MS0 AS1 AS0 DS1 DS0 DR1 DR0 CS1 CS0 MBE CME SNA ARE CLK
MB24 MB16 MB08 MB00
CA24 CA16 CA08 CA00
PA16 PA08 PA00
CM24 CM16 CM08 CM00
C36 MBUS 27 L
C80 MBUS 19 L
C77 MBUS 11 L
C73 MBUS 03 L
CACHE 27 H
CACHE 19 H
CACHE 11 H
CACHE 03 H
PAD 19 H
PAD 11 H
PAD 03 H
B63 XBUF 11 H
B69 MIC01 XBUF 03 H
B34 CMI DATA 27 H
B25 CMI DATA 19 H
B14 CMI DATA 11 H
B5 CMI DATA 03 H
DC607 MDR E154
WBUS 25 H C54
WBUS 17 H C3
WBUS 09 H C70
WBUS 01 H C5
MIC03 MAD 25 H
MIC03 MAD 17 H
MIC03 MAD 09 H
MIC03 MAD 01 H
C42 MBUS 25 L
B89 MBUS 17 L
C45 MBUS 09 L
C34 MBUS 01 L
CACHE 25 H
CACHE 17 H
CACHE 09 H
CACHE 01 H
PAD 17 H
PAD 09 H
B68 XBUF 09 H
A67 MIC01 XBUF 01 H
B32 CMI DATA 25 H
B21 CMI DATA 17 H
B12 CMI DATA 09 H
B3 CMI DATA 01 H
8 D FF 74S374 E139
MBUS 27 L C36
MBUS 26 L C33
MBUS 25 L C42
MBUS 24 L C37
MBUS 19 L C80
MBUS 18 L B90
MBUS 17 L B89
MBUS 16 L B92
MIC04 ENA SMDR L
MIC04 CLK SMDR L
D0 D1 D2 D3 D4 D5 D6 D7
Q0 Q1 Q2 Q3 Q4 Q5 Q6 Q7
OUT EN CLK
DC607 MDR E161
WBUS 26 H C39
WBUS 18 H C8
WBUS 10 H C49
WBUS 02 H C16
MIC03 MAD 26 H
MIC03 MAD 18 H
MIC03 MAD 10 H
MIC03 MAD 02 H
MIC06 XB SELECT H
MIC03 XB PC 01 H
MIC03 XB PC 00 H
MIC06 MMUX SEL S1 H
MIC05 LATCHED MSRC 2 H
MIC06 AMUX SEL S1 H
MIC06 AMUX SEL S0 H
MIC06 DBUS SEL S1 H
MIC06 DBUS SEL S0 H
MIC06 DBUS ROT S1 H
MIC06 DBUS ROT S0 H
MIC06 CLK SEL S1 H
MIC06 CLK SEL S0 H
MIC04 MBUS ENA H
MIC07 ENA CMI L
MIC07 SNAPSHOT CMI L
MIC07 ADD REG ENA L
MIC18 B CLK L
R19 75Ω
C33 MBUS 26 L
B70 MBUS 18 L
C75 MBUS 10 L
C88 MBUS 02 L
CACHE 26 H
CACHE 18 H
CACHE 10 H
CACHE 02 H
PAD 18 H
PAD 10 H
PAD 02 H
B70 XBUF 10 H
B66 MIC01 XBUF 02 H
B33 CMI DATA 26 H
B22 CMI DATA 18 H
B13 CMI DATA 10 H
B4 CMI DATA 02 H
DC607 MDR E140
WBUS 24 H C46
WBUS 16 H C10
WBUS 08 H C64
WBUS 00 H C20
MIC03 MAD 24 H
MIC03 MAD 16 H
MIC03 MAD 08 H
MIC03 MAD 00 H
MIC05 +3V
MIC06 XB SELECT H
MIC03 XB PC 01 H
MIC03 XB PC 00 H
MIC06 MMUX SEL S1 H
MIC05 LATCHED MSRC 2 H
MIC06 AMUX SEL S1 H
MIC06 AMUX SEL S0 H
MIC06 DBUS SEL S1 H
MIC06 DBUS SEL S0 H
MIC06 DBUS ROT S1 H
MIC06 DBUS ROT S0 H
MIC06 CLK SEL S1 H
MIC06 CLK SEL S0 H
MIC04 MBUS ENA H
MIC07 ENA CMI L
MIC07 SNAPSHOT CMI L
MIC07 ADD REG ENA L
MIC18 B CLK L
C37 MBUS 24 L
B92 MBUS 16 L
C65 MBUS 08 L
C17 MBUS 00 L
CACHE 24 H
CACHE 16 H
CACHE 08 H
CACHE 00 H
PAD 16 H
PAD 08 H
B50 XBUF 08 H
B56 MIC01 XBUF 00 H
B31 CMI DATA 24 H
B19 CMI DATA 16 H
B10 CMI DATA 08 H
B1 CMI DATA 00 H
8 D FF 74S374 E160
MBUS 11 L C77
MBUS 10 L C75
MBUS 09 L C49
MBUS 08 L C55
MBUS 03 L C73
MBUS 02 L C88
MBUS 01 L C34
MBUS 00 L C17
MIC04 ENA SMDR L
MIC04 CLK SMDR L
D0 D1 D2 D3 D4 D5 D6 D7
Q0 Q1 Q2 Q3 Q4 Q5 Q6 Q7
OUT EN CLK
REV. B
NUMBER L0003-0-1
CODE CS
SIZE D
SHEET B
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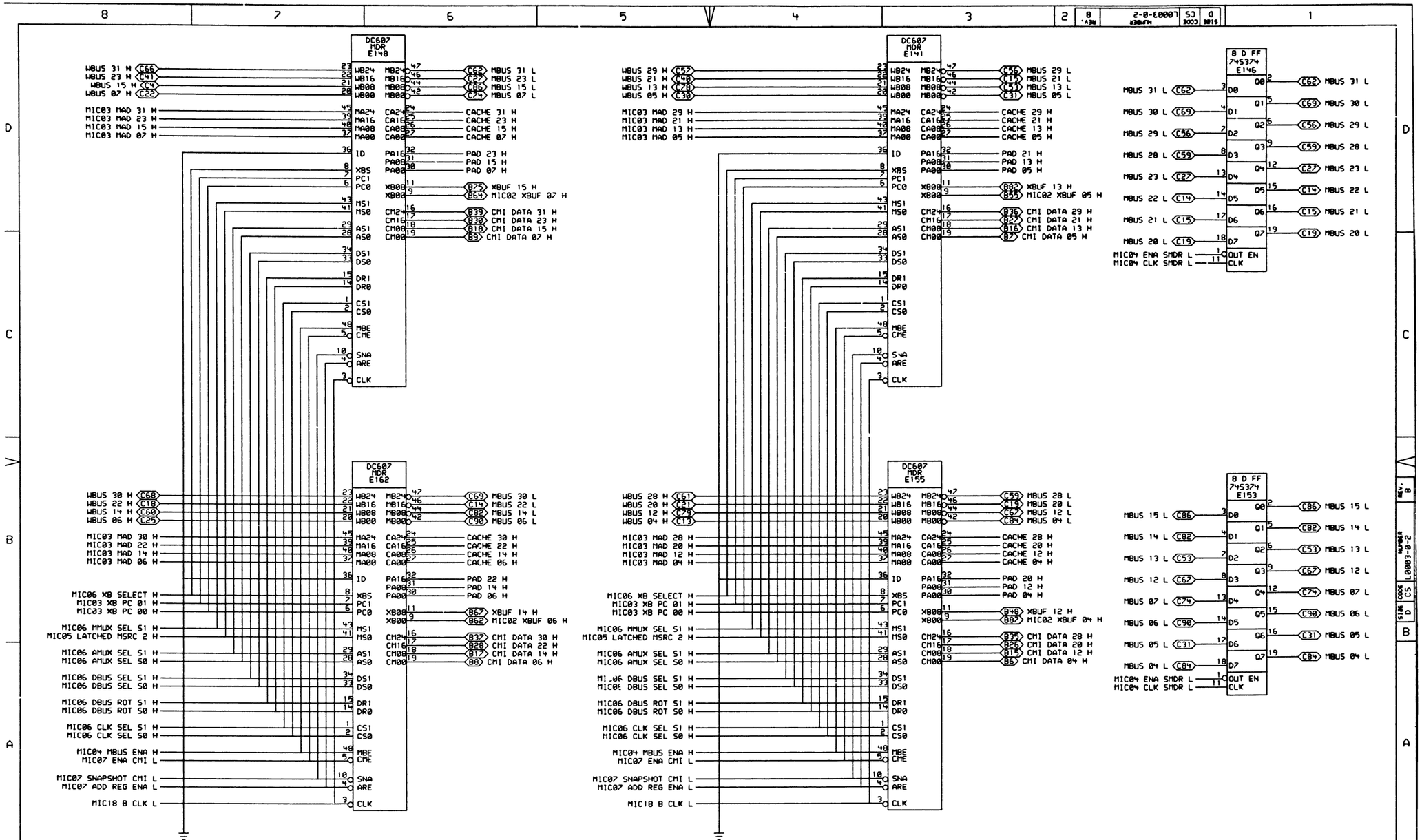
REVISIONS
CHK CHANGE NO. REV
digital
DRN. G.J.M.
CHK'D.
DATE 26-MAR-80
ENG.
DATE
BOARD LOCATION: AC3
SHEET 1 OF
[160,127]MIC01.DRW 17-FEB-80 15:27
NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0
FIRST USED ON OPTION/MODEL: 11/750
TITLE: DATA ROUTING & ALIGNMENT SHT1
SIZE D CODE CS NUMBER L0003-0-1 REV. B
COMETCHIPS, [160,127]MIC01.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC01.PLO[160,127] 26-MAR-80 10:17



REVISIONS		
CHK	CHANGE NO.	REV

digital

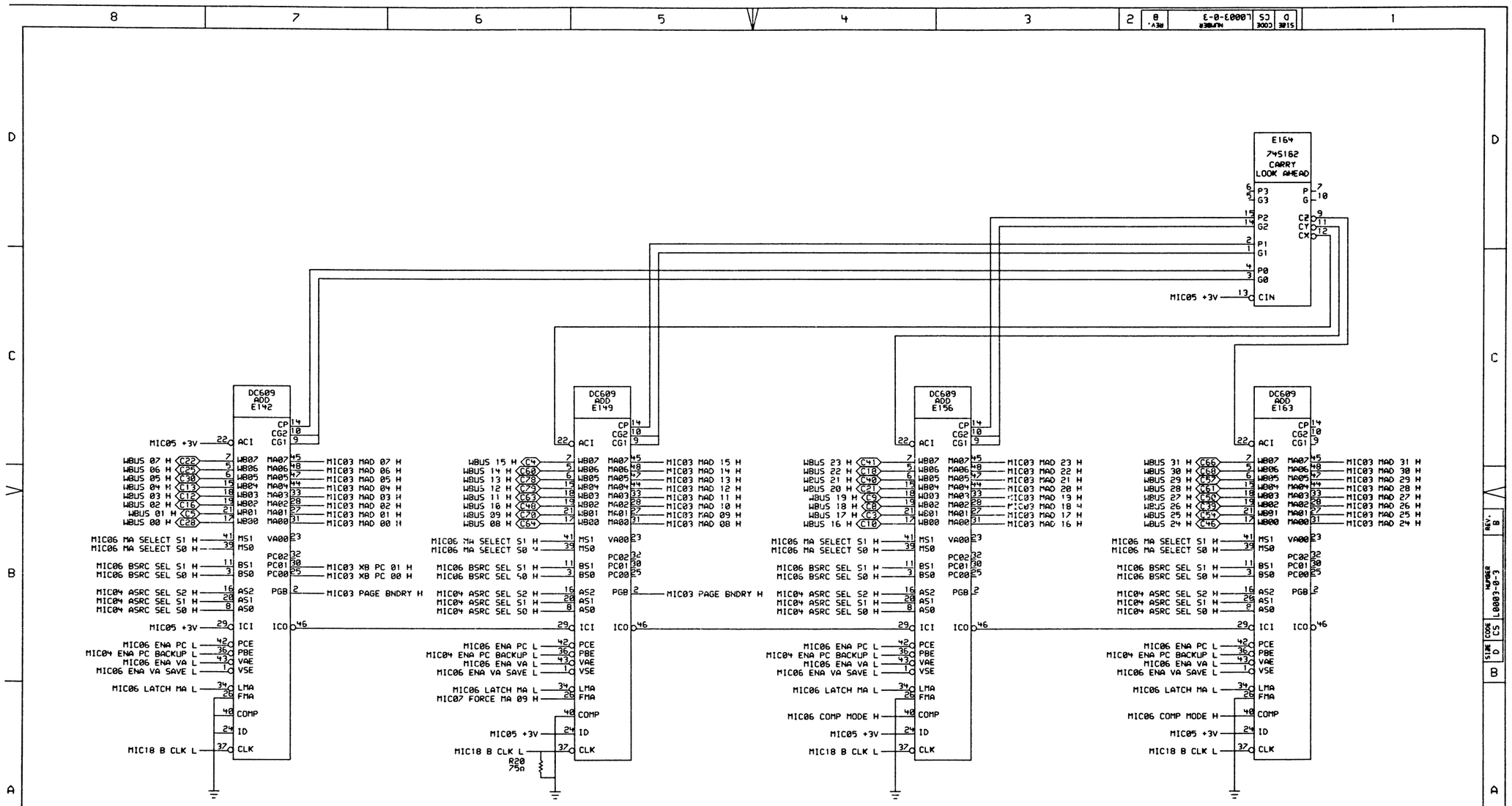
DRN. GJM
CHK'D.
DATE 26-MAR-80
ENG.
DATE
DATE
BOARD LOCATION: AC3
SHEET 1 OF

TITLE: DATA ROUTING & ALIGNMENT SHT2

[160,127]MIC02.DRW 17-FEB-80 15:29
FIRST USED ON OPTION/MODEL: 11/750
NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0

SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-2	B

COMETCHIPS, [160,127]MIC02.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC02.PLO[160,127] 26-MAR-80 10:17



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. GJM — DATE 26-MAR-80 — ENG. — DATE

CHK'D. — DATE

BOARD LOCATION: AC3

SHEET 1 OF 1

[160,127]MIC03.DRW 17-FEB-80 15:30

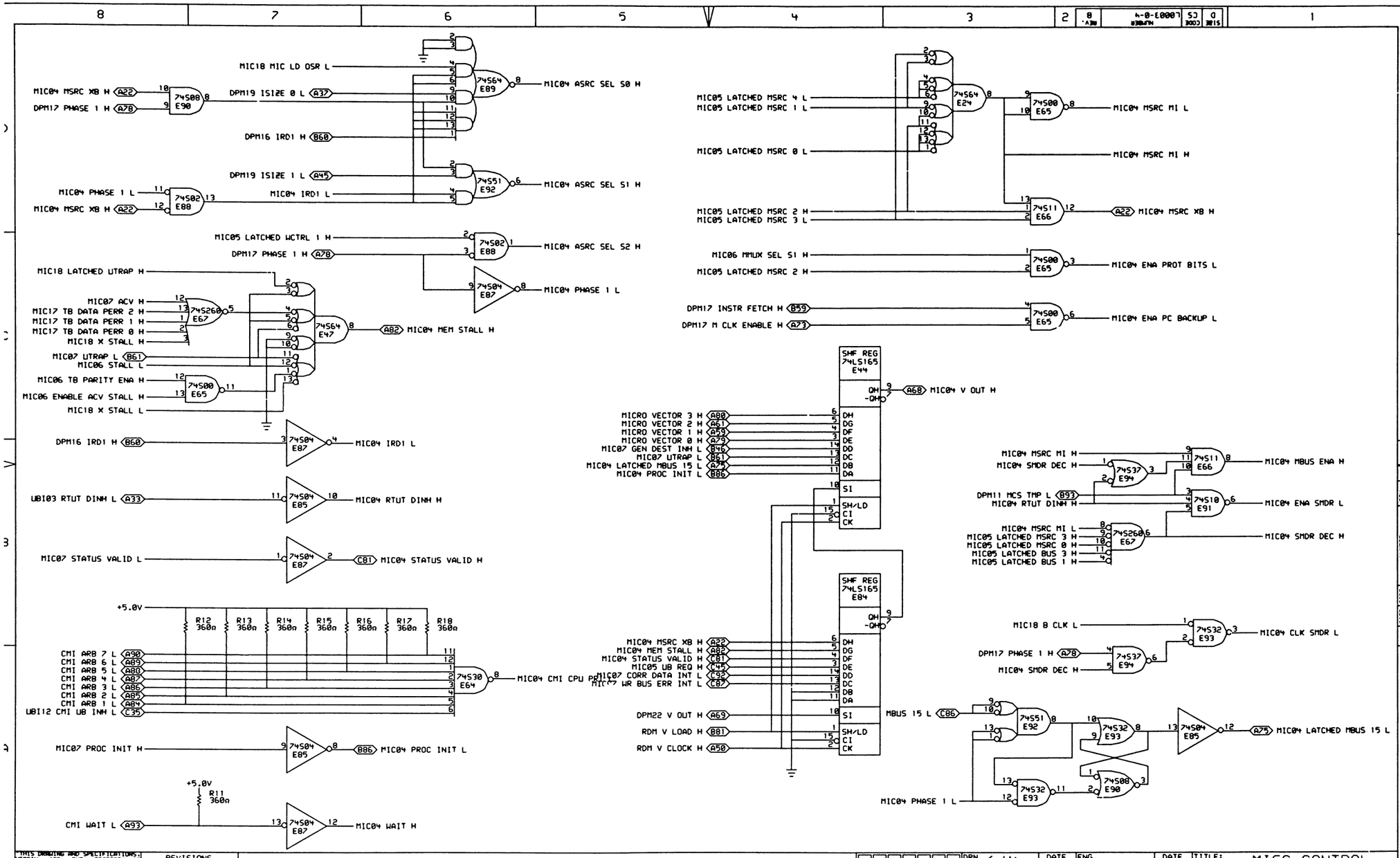
NEXT HIGHER ASSEMBLY:

FIRST USED ON OPTION/MODEL: 11/750 — B-DD-L0003-0-0

TITLE: MEMORY ADDRESS

SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-3	B

COMETCHIPS, [160,127]MIC03.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC03.PLO[160,127] 26-MAR-80 10:17



REVISIONS		
CHK	CHANGE NO.	REV

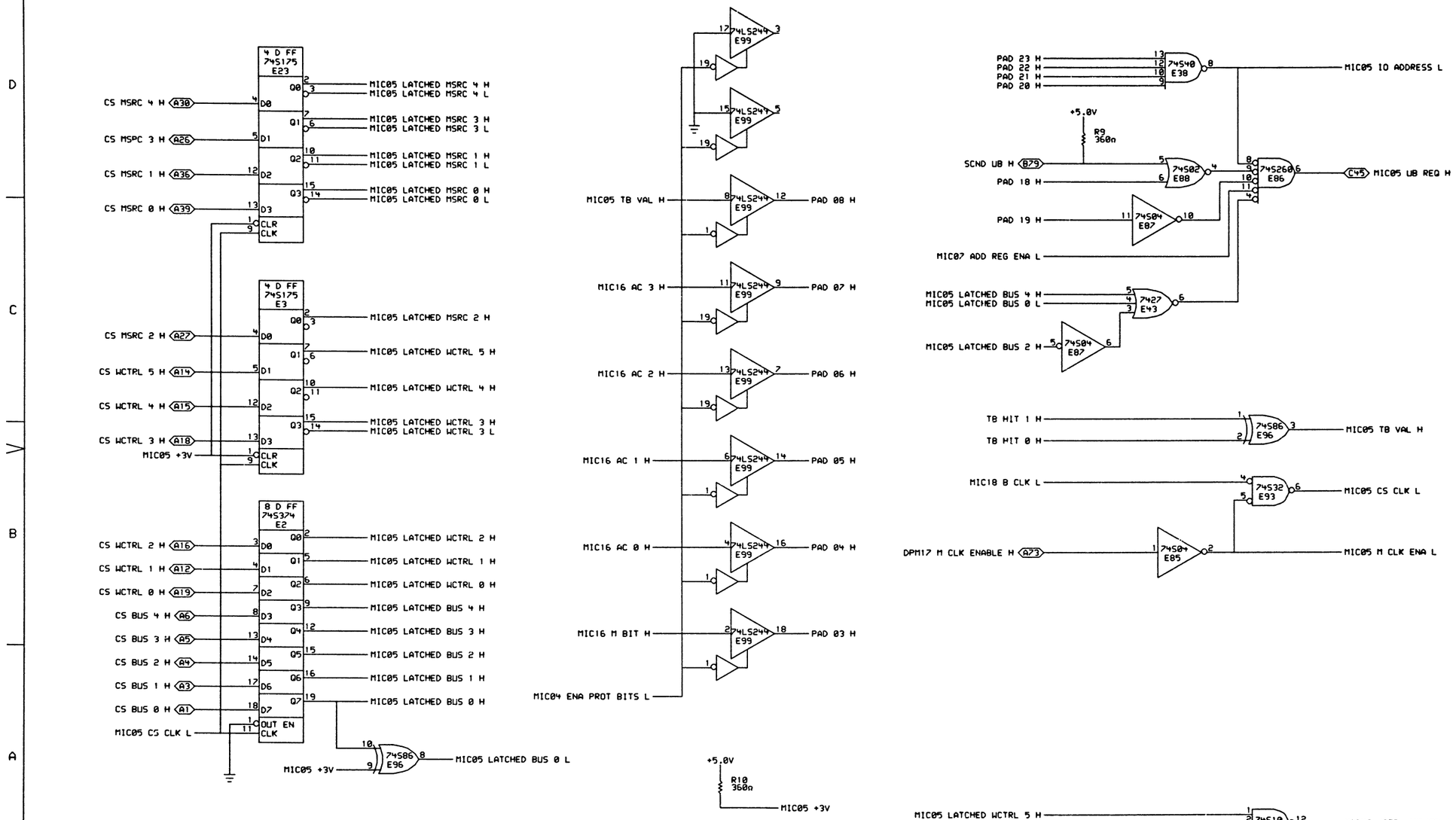
digital

DRN. GJM DATE 26-MAR-80 ENG. DATE
CHK'D. DATE BOARD LOCATION: AC3
SHEET 1 OF 1
(160,1271)MIC04.DRW 17-FEB-80 15:32 NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0
FIRST USED ON OPTION/MODEL: 11/750

TITLE: MISC CONTROL

SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-4	B

COMETCHIPS, [160,1271]MIC04.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC04.PLO[160,1271] 26-MAR-80 10:18



REVISIONS		
CHK	CHANGE NO.	REV

digital

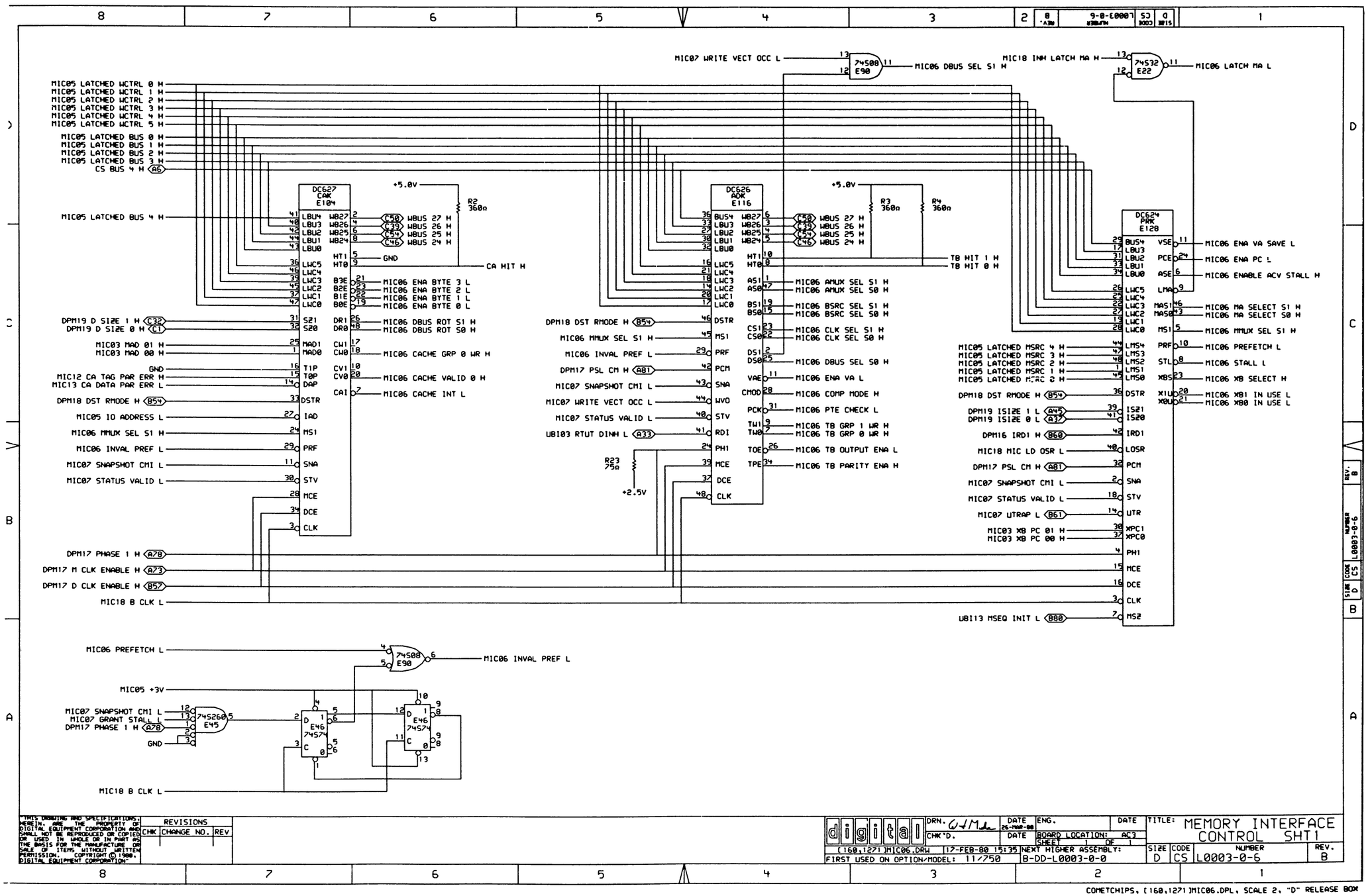
DRN. W.J.M. DATE 26-MAR-80 | ENG. DATE | TITLE: MEMORY INTERFACE CS LATCHES

CHK D. DATE | BOARD LOCATION: AC3 | SHEET 1 OF 1

(160,127)MIC05.DRW 17-FEB-80 15:34 | NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0 | FIRST USED ON OPTION/MODEL: 11/750

SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-5	B

COMETCHIPS, (160,127)MIC05.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC05 PLOT(160,127) 26-MAR-80 10:18

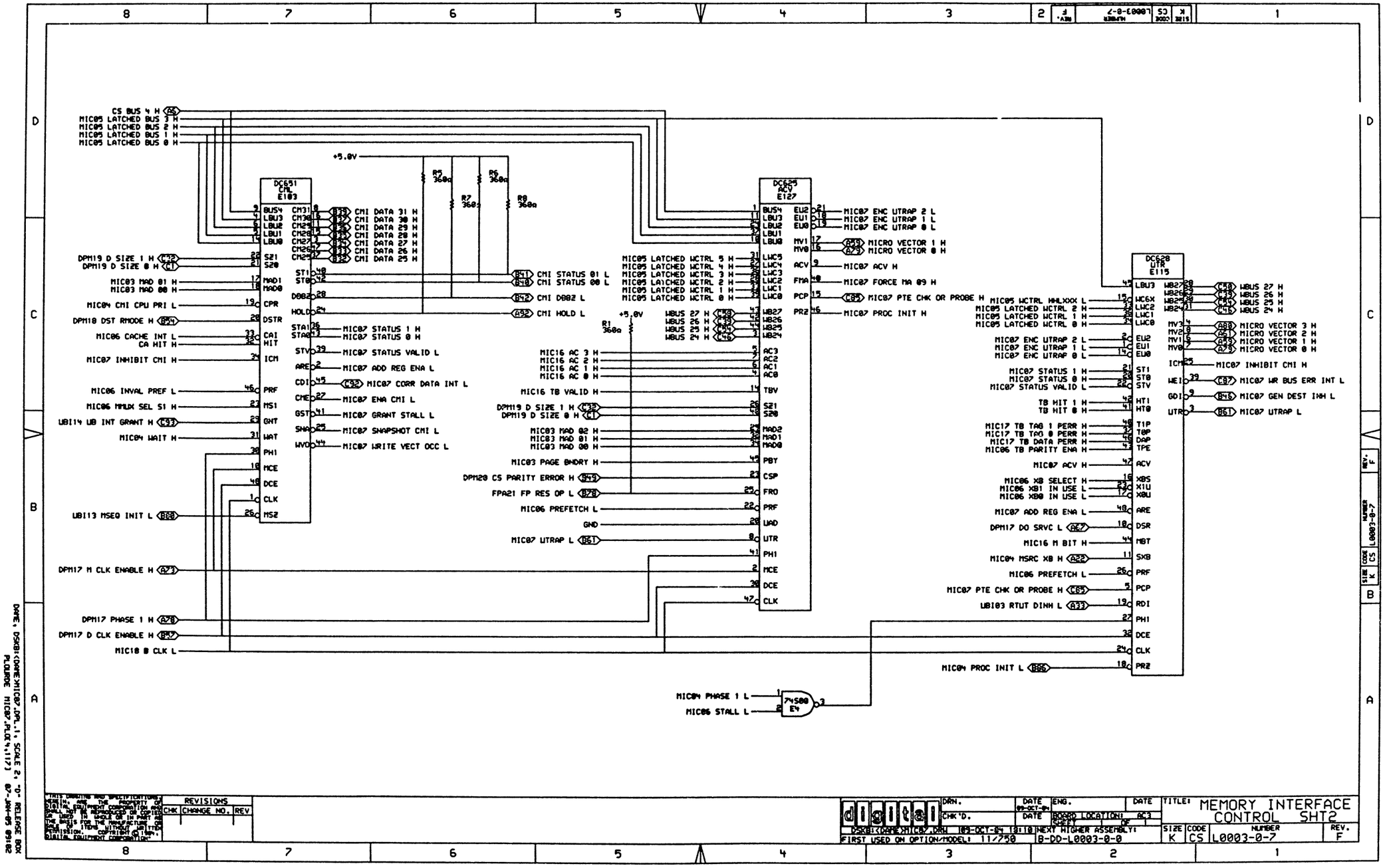


REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. WJM	DATE 26-MAR-80	ENG.	DATE	TITLE: MEMORY INTERFACE CONTROL SHT1
CHK'D.	DATE	BOARD LOCATION: AC3		
[160,1271]MIC06.DRW	17-FEB-80 15:35	SHEET 1 OF 1		
FIRST USED ON OPTION/MODEL: 11/750		NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0		SIZE D | CODE CS | NUMBER L0003-0-6 | REV. B

COMETCHIPS, [160,1271]MIC06.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC06.PLO[160,1271] 26-MAR-80 10:19



DRAWN: DSKB1:<DAVE.MIC07.DPL>.1, SCALE 2, "D" RELEASE BOX
PLOTTED: MIC07.PLOT;1 (12) 07-JAN-85 09:02

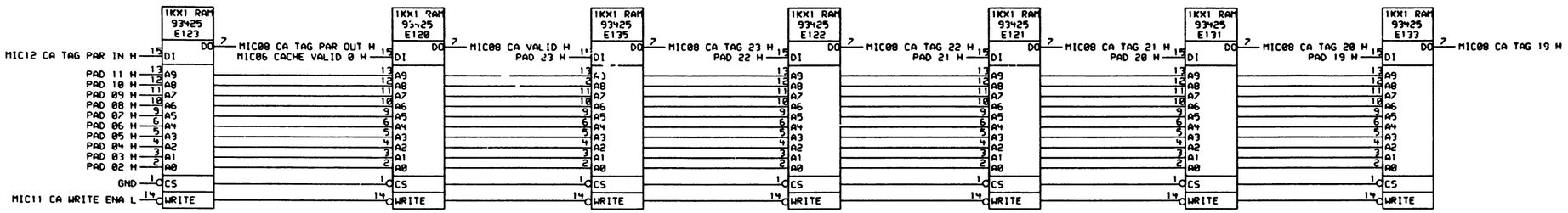
REVISIONS		
CHK	CHANGE NO.	REV

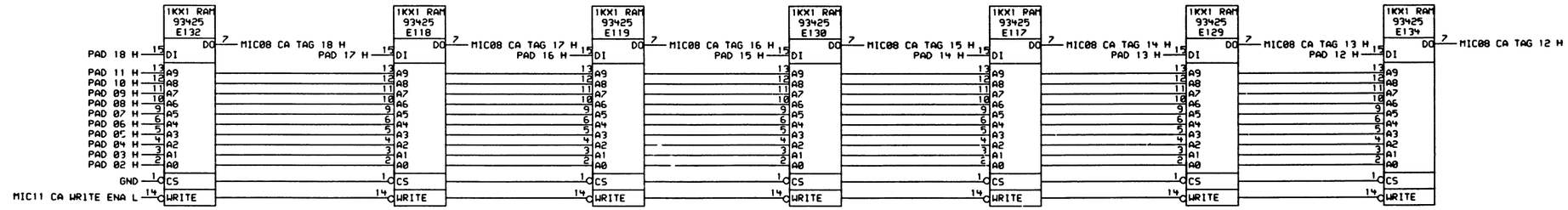
DRN.	DATE 09-OCT-84	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: SHEET	AC3 OF

DSKB1:<DAVE.MIC07.DRW 09-OCT-84 13:18> NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0
FIRST USED ON OPTION/MODEL: 11/750

TITLE: MEMORY INTERFACE CONTROL SHT2

SIZE	CODE	NUMBER	REV.
K	CS	L0003-0-7	F





REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. GJM DATE 26-MAR-80 | ENG. | DATE

CHK'D. | DATE | BOARD LOCATION: AC3 | SHEET 1 OF

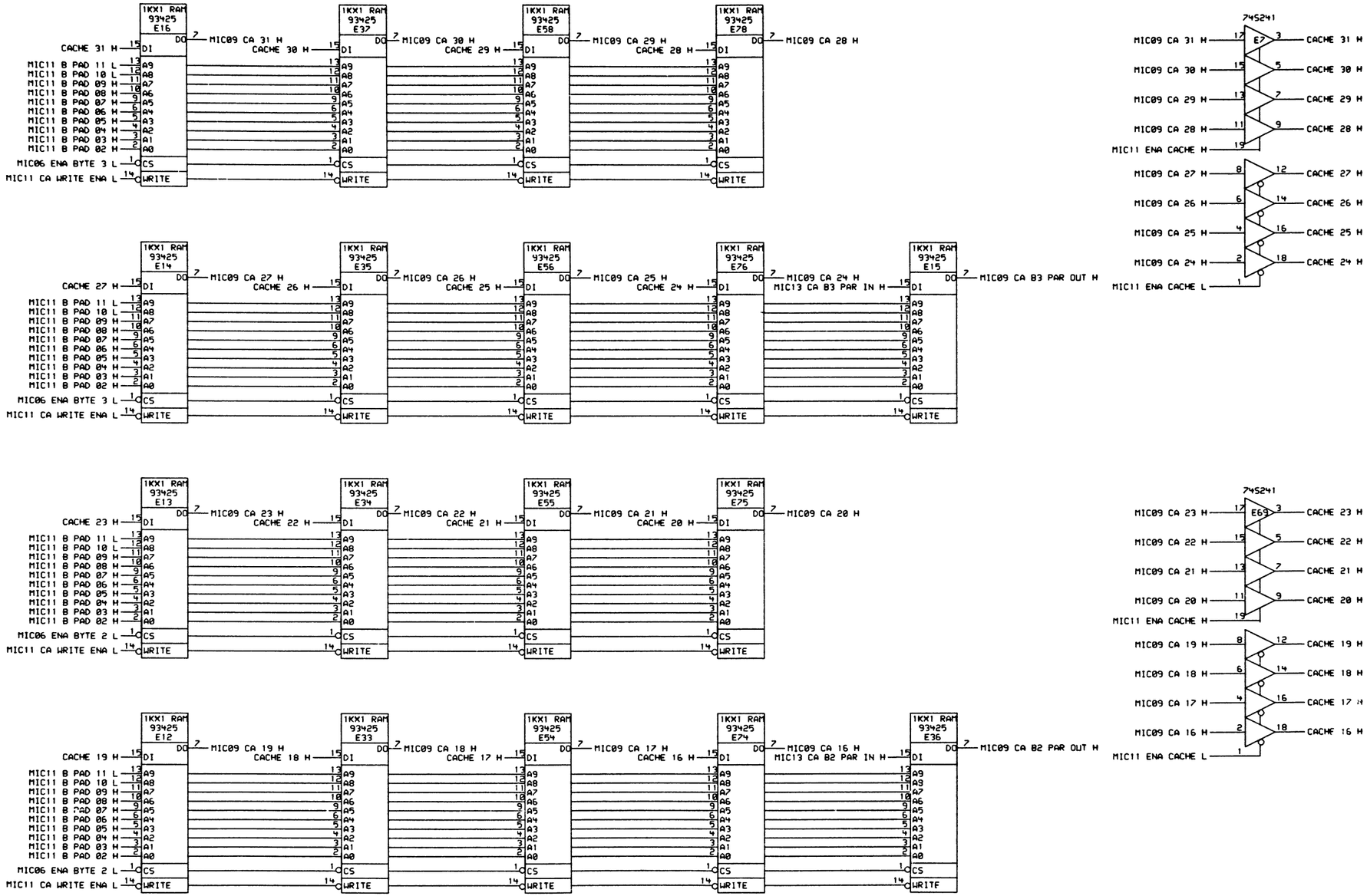
[160,127]MIC08.DRW 17-FEB-80 15:38 | NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0

FIRST USED ON OPTION/MODEL: 11/750

TITLE: CACHE TAG STORE

SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-8	B

COMETCHIPS, [160,127]MIC08.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC08.PLO[160,127] 26-MAR-80 10:20



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REVISIONS		
CHK	CHANGE NO.	REV

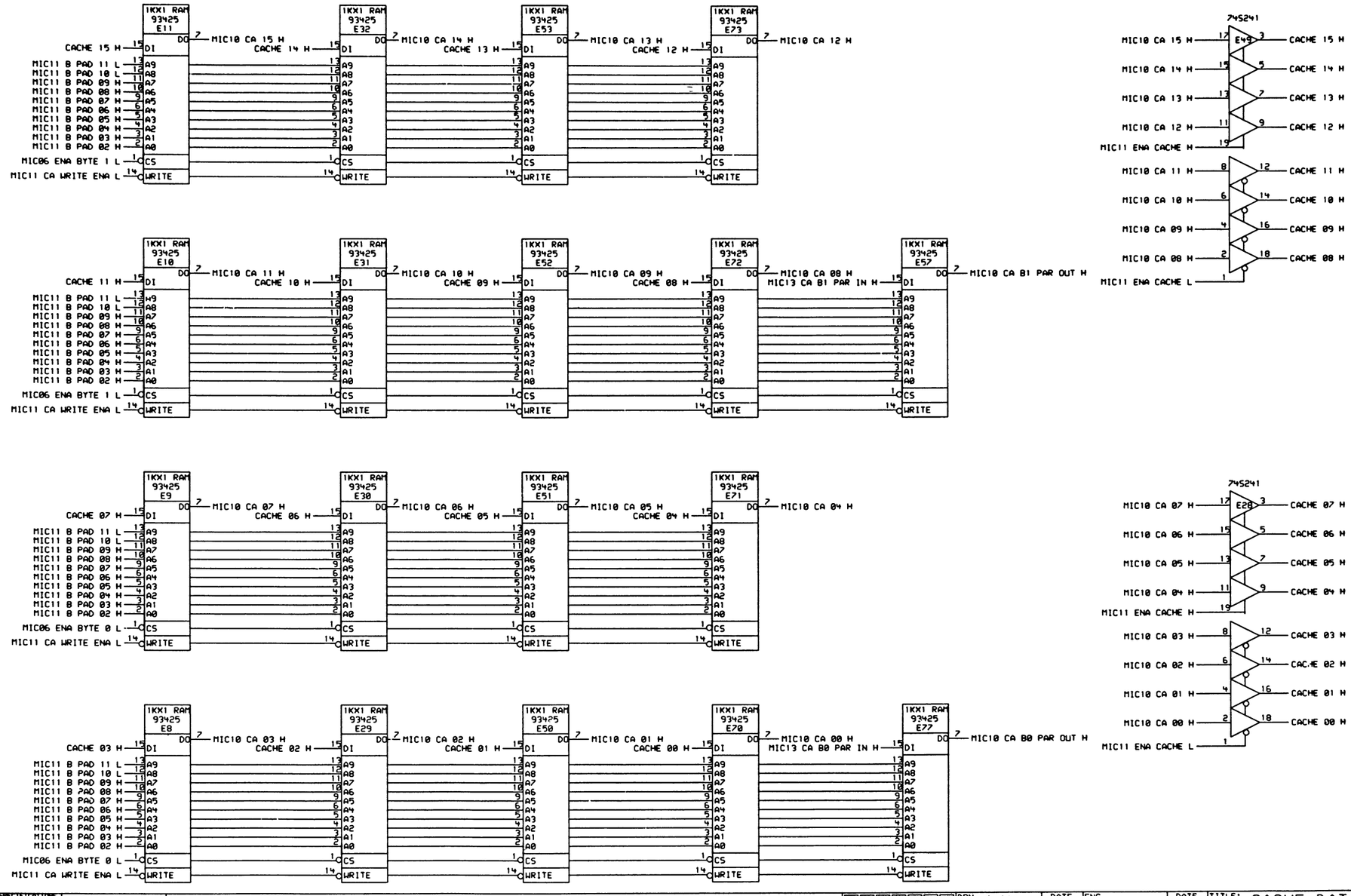
digital

DRN. GJM	DATE 26-MAR-80	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: AC3	
		SHEET 1 OF 1	
[160,1271]MIC09.DRW	17-FEB-80 15:40	NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL: 11/750		B-DD-L0003-0-0	

TITLE: CACHE DATA STORE BYTES 3 & 2

SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-9	B

COMETCHIPS, [160,1271]MIC09.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC09.PLO[160,1271] 26-MAR-80 10:20



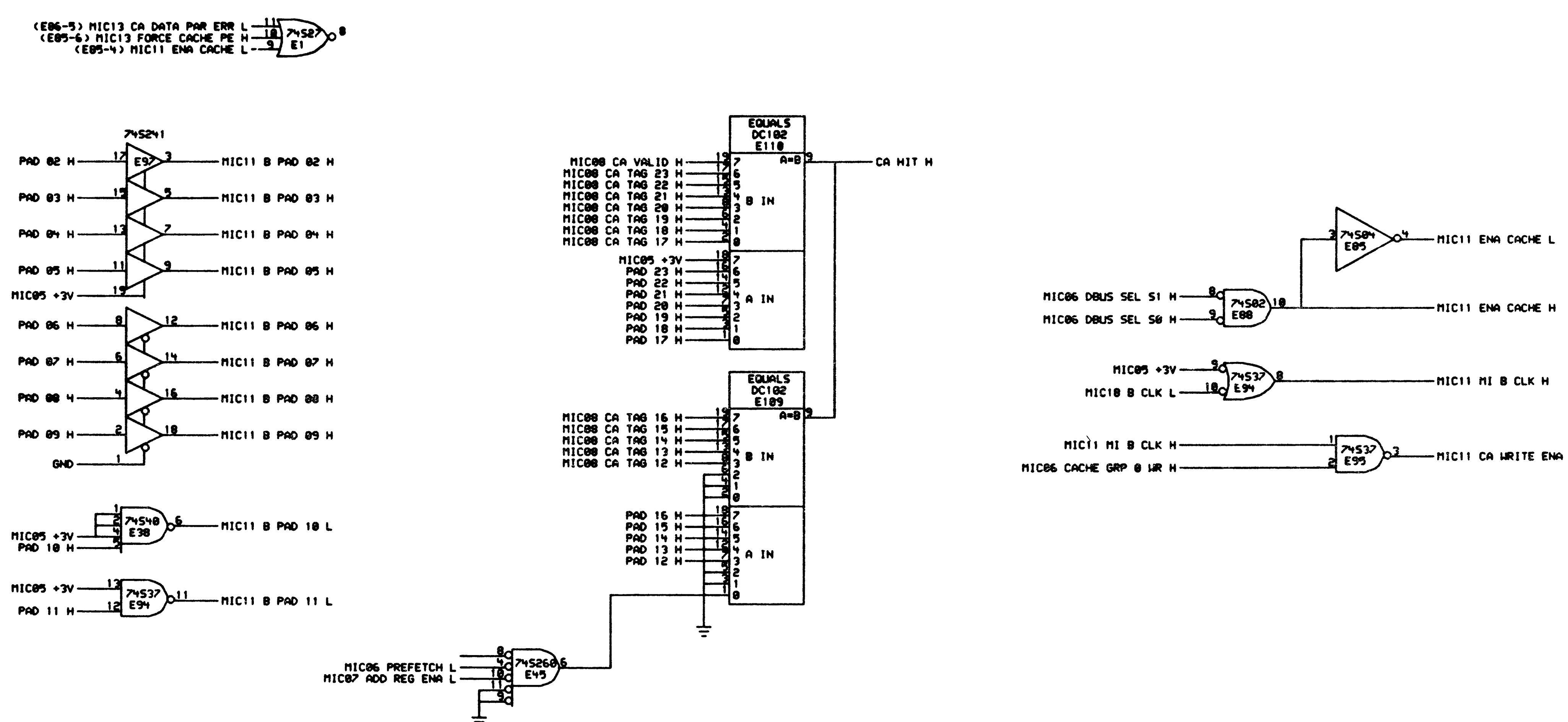
REVISIONS		
CHK	CHANGE NO.	REV

digital	DRN. WJM	DATE 26-MAR-80	ENG.
	CHK'D.	DATE	BOARD LOCATION: AC3
			SHEET 1 OF 1
[160,1271]MIC10.DRW 17-FEB-80 15:42			NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0
FIRST USED ON OPTION/MODEL: 11/750			

TITLE: CACHE DATA STORE BYTES 1 & 0

SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-10	B

COMETCHIPS, [160,1271]MIC10.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC10.PLO[160,1271] 26-MAR-80 10:22



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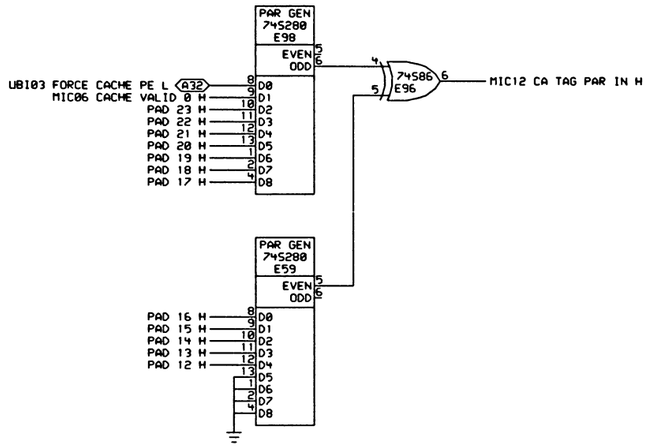
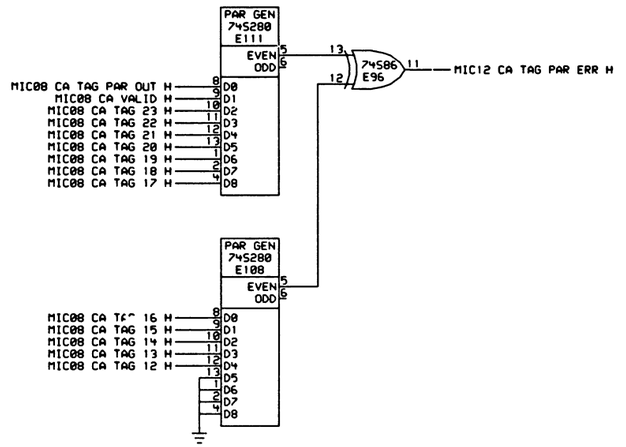
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN.	DATE 09-OCT-84	ENG.	DATE	TITLE: CACHE CONTROL
CHK'D.	DATE	BOARD LOCATION: AC3 SHEET 1 OF 1		
DSKB:<DAME>MIC11.DRW 09-OCT-84 10:20		NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0		SIZE K CODE CS NUMBER L0003-0-11 REV. D
FIRST USED ON OPTION/MODEL: 11/750				

DAME, DSKB:<DAME>MIC11.DPL.1, SCALE 2, "D" RELEASE BOX
PLOURDE MIC11.PLO(4,117) 07-JAN-85 09:03





REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. GJM DATE 26-MAR-80 | ENG. | DATE

CHK'D. | DATE | BOARD LOCATION: AC3 | SHEET 1 OF

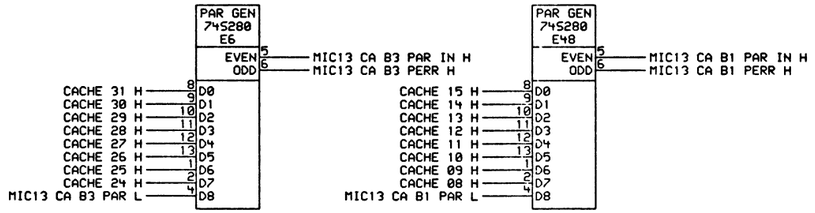
[160,1271]MIC12.DRW 17-FEB-80 15:49 | NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0

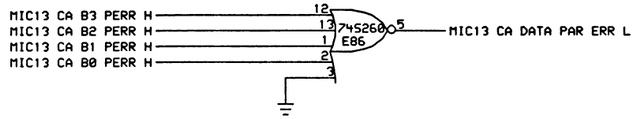
FIRST USED ON OPTION/MODEL: 11/750

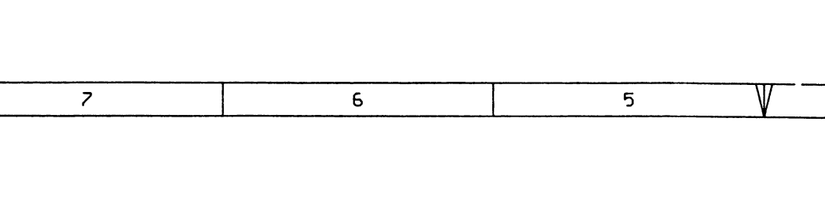
TITLE: CACHE TAG PARITY

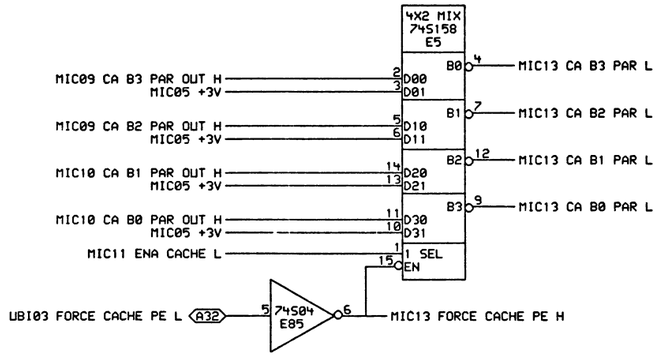
SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-12	B

COMETCHIPS, [160,1271]MIC12.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC12.PLO[160,1271] 26-MAR-80 10:26





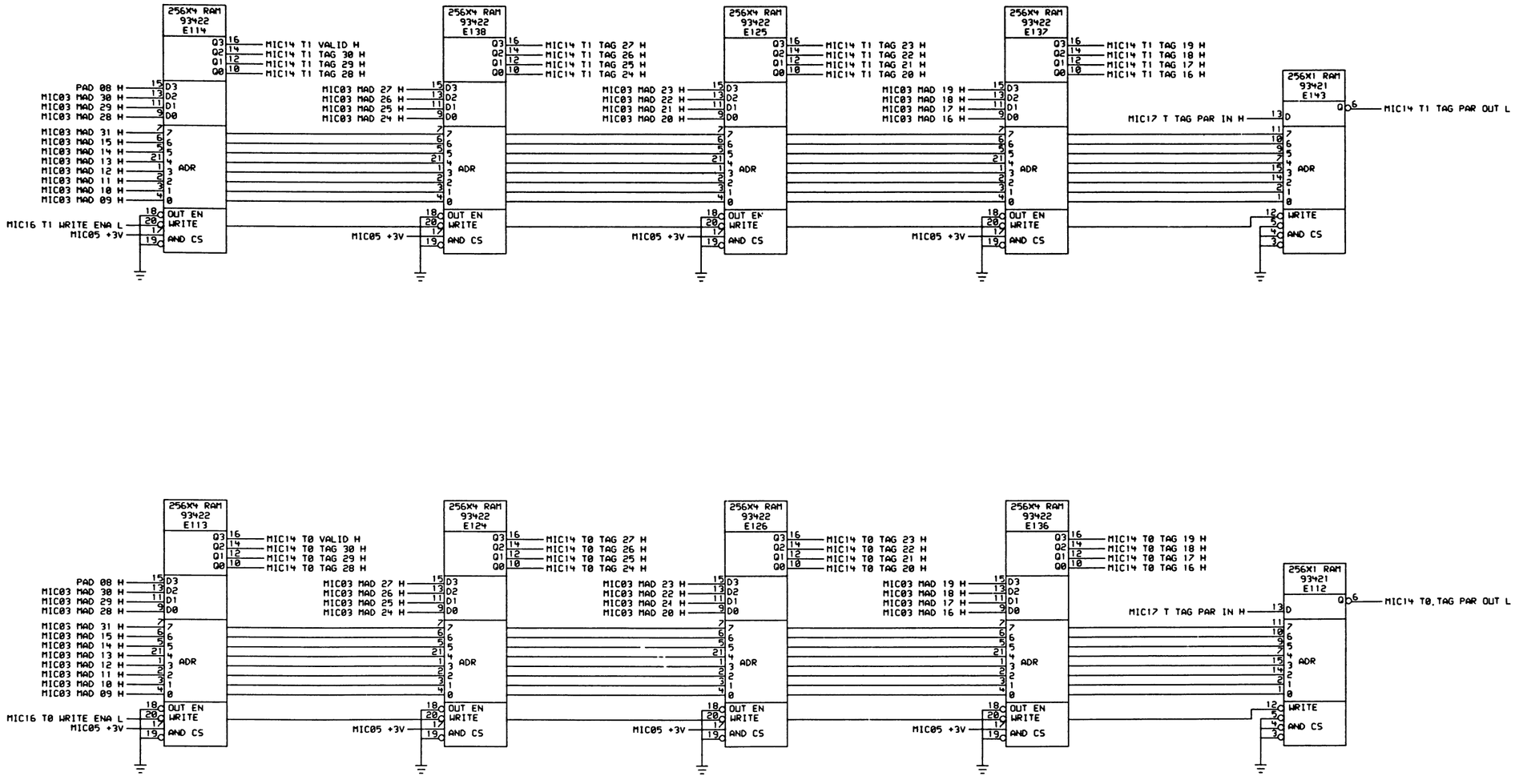




REVISIONS		
CHK	CHANGE NO.	REV

digital	DRN.	DATE 15-MAY-84	ENG.	DATE	TITLE: CACHE DATA PARITY
	CHK'D.	DATE	BOARD LOCATION: AC3 SHEET 1 OF 1		
DSKB:<DAME>MIC13.DRW 15-MAY-84 10:21			NEXT HIGHER ASSEMBLY:		SIZE K / CODE CS / NUMBER L0003-0-13 / REV. C
FIRST USED ON OPTION/MODEL: 11/750			B-DD-L0003-0-0		

SIZE K | CODE CS | NUMBER L0003-0-13 | REV. C



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. W.J.M. DATE 26-MAR-80 | ENG. | DATE

CHK'D. | DATE | BOARD LOCATION: AC3 | SHEET 1 OF 1

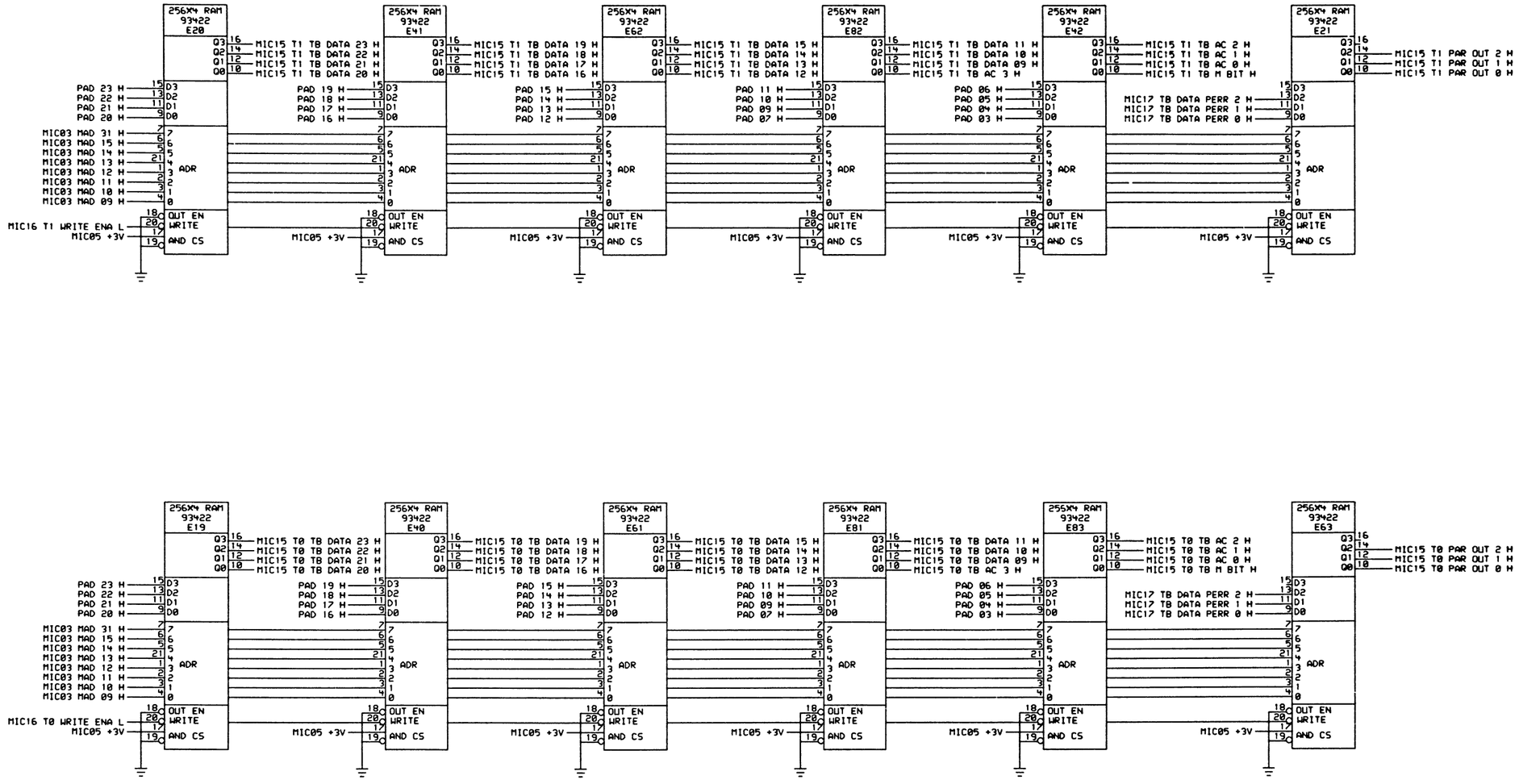
[160,1271]MIC14.DRW 17-FEB-80 15:51 | NEXT HIGHER ASSEMBLY:

FIRST USED ON OPTION/MODEL: 11/750 | B-DD-L0003-0-0

TITLE: TB TAG

SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-14	B

COMETCHIPS, [160,1271]MIC14.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC14.PLO[160,1271] 26-MAR-80 10:27



REVISIONS		
CHK	CHANGE NO.	REV

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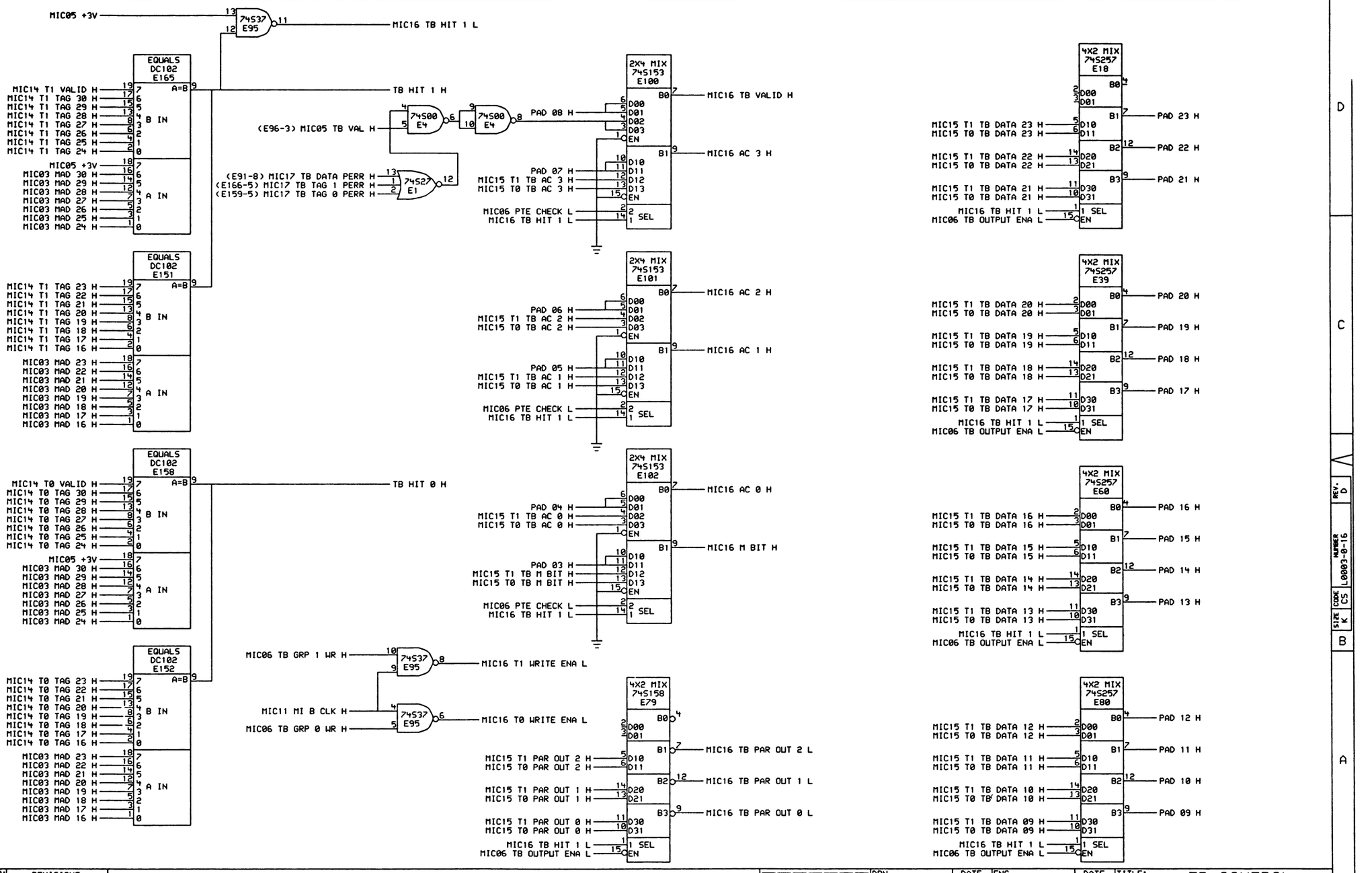
digital

DRN. WJM	DATE 26-MAR-80	ENG.	DATE
CHK D.	DATE	BOARD LOCATION: AC3	
		SHEET 1 OF 1	
[160,1271]MIC15.DRW	17-FEB-80 15:52	NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL: 11/750		B-DD-L0003-0-0	

TITLE: TB DATA STORE

SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-15	B

COMETCHIPS, [160,1271]MIC15.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MIC15.PLO[160,1271] 26-MAR-80 10:27

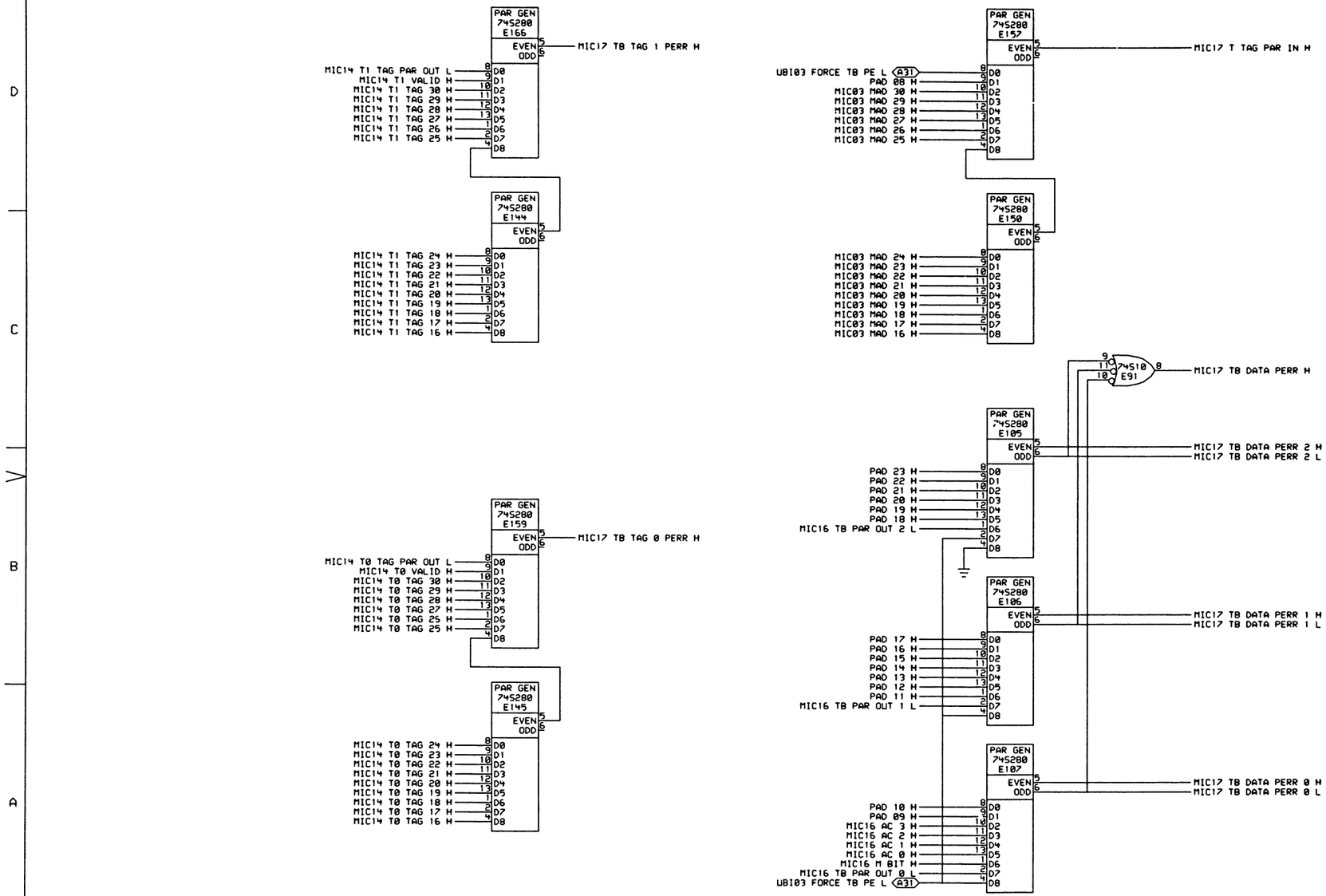


REVISIONS		
CHK	CHANGE NO.	REV

DRN.	DATE 02-AUG-84	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: AC3	
		SHEET 1 OF 1	
DSKB:<DAME>MIC16.DRW	15-MAY-84 14:12	NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL: 11/750		B-DD-L0003-0-0	

TITLE: TB CONTROL

SIZE	CODE	NUMBER	REV.
K	CS	L0003-0-16	D



REVISIONS		
CHK	CHANGE NO.	REV

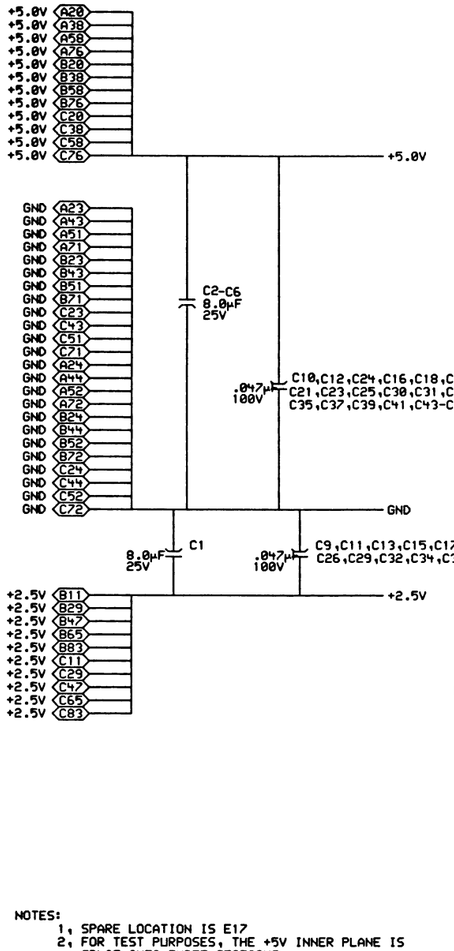
digital

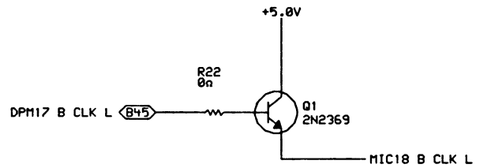
DRN. W.J.M. DATE 26-MAR-80 ENG. DATE
CHK'D. DATE
BOARD LOCATION: AC3
SHEET 1 OF 1
[160,1271]MIC17.DRW 17-FEB-80 15:55 NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL: 11/750 B-DD-L0003-0-0

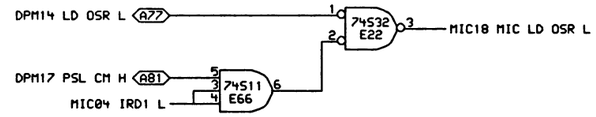
TITLE: TB PARITY

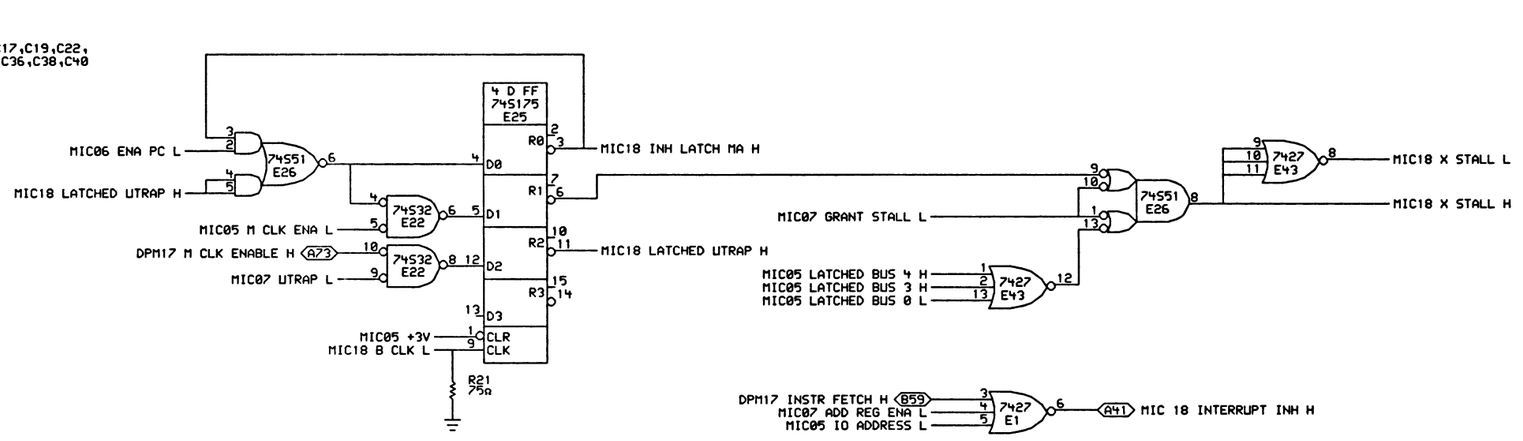
SIZE	CODE	NUMBER	REV.
D	CS	L0003-0-17	B

REV.	NUMBER	CODE	SIZE
B	L0003-0-17	CS	D









NOTES:
1. SPARE LOCATION IS E17
2. FOR TEST PURPOSES, THE +5V INNER PLANE IS SPLIT INTO THREE SECTIONS.
   FINGER PINS A20,A38,A58,A6,B20,B38,B58,B76
   SUPPLY POWER TO:
   E1-E102,E108-E114,E118-E126,R2,R5-R7,R9,R11-R18.
   FINGER PINS C20 AND C38 SUPPLY POWER TO:
   E103-E107,E115,E117,E127-E138,E143,E145,
   E151,E152,E158,E159,R1,R3,R4,R8,R10,Q1.
   FINGER PINS C58 AND C76 SUPPLY POWER TO:
   E139-E142,E146-E150,E153-E157,E160-E166.

REVISIONS		
CHK	CHANGE NO.	REV

DRN.	DATE 15-MAY-84	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: AC3	
		SHEET 1 OF 1	
DSKB:<DAME>MIC18.DRW 15-MAY-84 10:48		NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL: 11/750		B-DD-L0003-0-0	

TITLE: MISC. CONTROL AND DECOUPLING

SIZE	CODE	NUMBER	REV.
K	CS	L0003-0-18	F

SIGNAL NAME	PAGE NUMBER(S)
CA HIT H	07,06,11
CACHE 00 H	13,10,01
CACHE 01 H	13,10,01
CACHE 02 H	13,10,01
CACHE 03 H	10,13,01
CACHE 04 H	13,10,02
CACHE 05 H	13,10,02
CACHE 06 H	13,10,02
CACHE 07 H	10,13,02
CACHE 08 H	13,10,01
CACHE 09 H	13,10,01
CACHE 10 H	10,13,01
CACHE 11 H	10,13,01
CACHE 12 H	13,10,02
CACHE 13 H	13,10,02
CACHE 14 H	10,13,02
CACHE 15 H	10,13,02
CACHE 16 H	13,09,01
CACHE 17 H	09,13,01
CACHE 18 H	09,13,01
CACHE 19 H	09,13,01
CACHE 20 H	13,09,02
CACHE 21 H	09,13,02
CACHE 22 H	09,13,02
CACHE 23 H	09,13,02
CACHE 24 H	13,09,01
CACHE 25 H	13,09,01
CACHE 26 H	13,09,01
CACHE 27 H	13,09,01
CACHE 28 H	13,09,02
CACHE 29 H	13,09,02
CACHE 30 H	13,09,02
CACHE 31 H	13,09,02
CMI ARB 1 L	04
CMI ARB 2 L	04
CMI ARB 3 L	04
CMI ARB 4 L	04
CMI ARB 5 L	04
CMI ARB 6 L	04
CMI ARB 7 L	04
CMI DATA 00 H	01
CMI DATA 01 H	01
CMI DATA 02 H	01
CMI DATA 03 H	01
CMI DATA 04 H	02
CMI DATA 05 H	02
CMI DATA 06 H	02
CMI DATA 07 H	02
CMI DATA 08 H	01
CMI DATA 09 H	01

SIGNAL NAME	PAGE NUMBER(S)
CMI DATA 10 H	01
CMI DATA 11 H	01
CMI DATA 12 H	02
CMI DATA 13 H	02
CMI DATA 14 H	02
CMI DATA 15 H	02
CMI DATA 16 H	01
CMI DATA 17 H	01
CMI DATA 18 H	01
CMI DATA 19 H	01
CMI DATA 20 H	02
CMI DATA 21 H	02
CMI DATA 22 H	02
CMI DATA 23 H	02
CMI DATA 24 H	01
CMI DATA 25 H	07,01
CMI DATA 26 H	07,01
CMI DATA 27 H	07,01
CMI DATA 28 H	07,02
CMI DATA 29 H	07,02
CMI DATA 30 H	07,02
CMI DATA 31 H	07,02
CMI DBBZ L	07
CMI HOLD L	07
CMI STATUS 00 L	07
CMI STATUS 01 L	07
CMI WAIT L	04
CS BUS 0 H	05
CS BUS 1 H	05
CS BUS 2 H	05
CS BUS 3 H	05
CS BUS 4 H	05,07,06
CS MSRC 0 H	05
CS MSRC 1 H	05
CS MSRC 2 H	05
CS MSRC 3 H	05
CS MSRC 4 H	05
CS WCTRL 0 H	05
CS WCTRL 1 H	05
CS WCTRL 2 H	05
CS WCTRL 3 H	05
CS WCTRL 4 H	05
CS WCTRL 5 H	05
DPM11 MCS TMP L	04
DPM14 LD OSR L	18
DPM16 IRD1 H	04,06
DPM17 B CLK L	18
DPM17 D CLK ENABLE H	07,06
DPM17 DO SRVC L	07
DPM17 INSTR FETCH H	04,18

SIGNAL NAME	PAGE NUMBER(S)
DPM17 M CLK ENABLE H	18,04,05,07,06
DPM17 PHASE 1 H	06,04,07
DPM17 PSL CM H	18,06
DPM18 DST RMODE H	07,06
DPM19 D SIZE 0 H	07,06
DPM19 D SIZE 1 H	07,06
DPM19 ISIZE 0 L	04,06
DPM19 ISIZE 1 L	04,06
DPM20 CS PARITY ERROR H	07
DPM22 V OUT H	04
FPA21 FP RES OP L	07
MBUS 00 L	01
MBUS 01 L	01
MBUS 02 L	01
MBUS 03 L	01
MBUS 04 L	02
MBUS 05 L	02
MBUS 06 L	02
MBUS 07 L	02
MBUS 08 L	01
MBUS 09 L	01
MBUS 10 L	01
MBUS 11 L	01
MBUS 12 L	02
MBUS 13 L	02
MBUS 14 L	02
MBUS 15 L	04,02
MBUS 16 L	01
MBUS 17 L	01
MBUS 18 L	01
MBUS 19 L	01
MBUS 20 L	02
MBUS 21 L	02
MBUS 22 L	02
MBUS 23 L	02
MBUS 24 L	01
MBUS 25 L	01
MBUS 26 L	01
MBUS 27 L	01
MBUS 28 L	02
MBUS 29 L	02
MBUS 30 L	02
MBUS 31 L	02
MIC01 XBUF 00 H	01
MIC01 XBUF 01 H	01
MIC01 XBUF 02 H	01
MIC01 XBUF 03 H	01
MIC02 XBUF 04 H	02
MIC02 XBUF 05 H	02
MIC02 XBUF 06 H	02

NOTES:

1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. [signature] DATE 06-NOV-80 — CHK'D. DATE — ENG. DATE

[160,1271]MIC19.DRW 06-NOV-80 18:24

FIRST USED ON OPTION/MODEL: 11/750

BOARD LOCATION: AC3 — SHEET 1 OF 1

NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0

TITLE: MIC FORWARD REFERENCE

SIZE D — CODE CS — NUMBER L0003-0-19 — REV. C

SIGNAL NAME	PAGE NUMBER(S)
MIC02 XBUF 07 H	02
MIC03 MAD 00 H	07,06,01,03
MIC03 MAD 01 H	07,06,03,01
MIC03 MAD 02 H	07,03,01
MIC03 MAD 03 H	03,01
MIC03 MAD 04 H	03,02
MIC03 MAD 05 H	02,03
MIC03 MAD 06 H	03,02
MIC03 MAD 07 H	03,02
M'.03 MAD 08 H	01,03
MIC03 MAD 09 H	15,14,03,01
MIC03 MAD 10 H	15,14,03,01
MIC03 MAD 11 H	15,14,01,03
MIC03 MAD 12 H	15,14,03,02
MIC03 MAD 13 H	15,14,02,03
MIC03 MAD 14 H	15,14,03,02
MIC03 MAD 15 H	15,14,02,03
MIC03 MAD 16 H	14,01,17,16,03
MIC03 MAD 17 H	14,17,16,01,03
MIC03 MAD 18 H	14,17,16,03,01
MIC03 MAD 19 H	14,01,17,16,03
MIC03 MAD 20 H	14,17,16,02,03
MIC03 MAD 21 H	14,02,17,16,03
MIC03 MAD 22 H	14,17,16,03,02
MIC03 MAD 23 H	14,02,17,16,03
MIC03 MAD 24 H	14,01,17,16,03
MIC03 MAD 25 H	14,01,17,16,03
MIC03 MAD 26 H	14,17,16,01,03
MIC03 MAD 27 H	14,01,17,16,03
MIC03 MAD 28 H	14,02,17,16,03
MIC03 MAD 29 H	14,02,17,16,03
MIC03 MAD 30 H	14,17,16,02,03
MIC03 MAD 31 H	15,14,02,03
MIC03 PAGE BNDRY H	07,03
MIC03 XB PC 00 H	06,01,02,03
MIC03 XB PC 01 H	06,01,02,03
MIC04 ASRC SEL S0 H	04,03
MIC04 ASRC SEL S1 H	04,03
MIC04 ASRC SEL S2 H	04,03
MIC04 CLK SMDR L	04,01,02
MIC04 CMI CPU PRI L	04,07
MIC04 ENA PC BACKUP L	04,03
MIC04 ENA PROT BITS L	04,05
MIC04 ENA SMDR L	04,01,02
MIC04 IRD1 L	18,04
MIC04 LATCHED MBUS 15 L	04
MIC04 MBUS ENA H	04,01,02
MIC04 MEM STALL H	04
MIC04 MSRC MI H	04
MIC04 MSRC MI L	04

SIGNAL NAME	PAGE NUMBER(S)
MIC04 MSRC XB H	04,07
MIC04 PHASE 1 L	04,07
MIC04 PROC INIT L	04,07
MIC04 RTUT DINH H	04
MIC04 SMDR DEC H	04
MIC04 STATUS VALID H	04
MIC04 V OUT H	04
MIC04 WAIT H	04,07
MIC05 +3V	05,13,15,18,11,06,16,14,01,03
MIC05 CS CLK L	05
MIC05 IO ADDRESS L	05,06,18
MIC05 LATCHED BUS 0 H	05,07,06
MIC05 LATCHED BUS 0 L	05,18
MIC05 LATCHED BUS 1 H	05,04,07,06
MIC05 LATCHED BUS 2 H	05,07,06
MIC05 LATCHED BUS 3 H	05,18,04,07,06
MIC05 LATCHED BUS 4 H	05,18,06
MIC05 LATCHED MSRC 0 H	05,04,06
MIC05 LATCHED MSRC 0 L	05,04
MIC05 LATCHED MSRC 1 H	05,06
MIC05 LATCHED MSRC 1 L	05,04
MIC05 LATCHED MSRC 2 H	05,04,06,01,02
MIC05 LATCHED MSRC 3 H	05,04,06
MIC05 LATCHED MSRC 3 L	05,04
MIC05 LATCHED MSRC 4 H	05,06
MIC05 LATCHED MSRC 4 L	05,04
MIC05 LATCHED WCTRL 0 H	05,06,07
MIC05 LATCHED WCTRL 1 H	05,04,06,07
MIC05 LATCHED WCTRL 2 H	05,06,07
MIC05 LATCHED WCTRL 3 H	05,06,07
MIC05 LATCHED WCTRL 3 L	05
MIC05 LATCHED WCTRL 4 H	05,06,07
MIC05 LATCHED WCTRL 5 H	05,06,07
MIC05 M CLK ENA L	18,05
MIC05 TB VAL H	05,16
MIC05 WB REQ H	04,05
MIC05 WCTRL HHLXXX L	05,07
MIC06 AMUX SEL S0 H	06,01,02
MIC06 AMUX SEL S1 H	06,01,02
MIC06 BSRC SEL S0 H	06,03
MIC06 BSRC SEL S1 H	06,03
MIC06 CACHE GRP 0 WR H	11,06
MIC06 CACHE INT L	07,06
MIC06 CACHE VALID 0 H	12,06 08
MIC06 CLK SEL S0 H	06,0.,0?
MIC06 CLK SEL S1 H	06,01,0.
MIC06 COMP MODE H	06,03
MIC06 DBUS ROT S0 H	06,01,02
MIC06 DBUS ROT S1 H	06,01,02
MIC06 DBUS SEL S0 H	11,06,01,02

SIGNAL NAME	PAGE NUMBER(S)
MIC06 DBUS SEL S1 H	11,06,01,02
MIC06 ENA BYTE 0 L	10,06
MIC06 ENA BYTE 1 L	10,06
MIC06 ENA BYTE 2 L	09,06
MIC06 ENA BYTE 3 L	09,06
MIC06 ENA PC L	10,11,06,03
MIC06 ENA VA L	06,03
MIC06 ENA VA SAVE L	06,03
MIC06 ENABLE ACV STALL H	04,06
MIC06 INVAL PREF L	06,07
MIC06 LATCH MA L	06,03
MIC06 MA SELECT S0 H	06,03
MIC06 MA SELECT S1 H	06,03
MIC06 MMUX SEL S1 H	04,07,06,01,02
MIC06 PREFETCH L	11,06,07
MIC06 PTE CHECK L	16,06
MIC06 STALL L	04,06,07
MIC06 TB GRP 0 WR H	16,06
MIC06 TB GRP 1 WR H	16,06
MIC06 TB OUTPUT ENA L	16,06
MIC06 TB PARITY ENA H	04,07,06
MIC06 XB SELECT H	07,06,01,02
MIC06 XB0 IN USE L	07,06
MIC06 XB1 IN USE L	07,06
MIC07 ACV H	04,07
MIC07 ADD REG ENA L	11,05,07,01,02,18
M'C07 CORR DATA INT L	04,07
MICA7 ENA CMI L	07,01,02
MIC07 ENC UTRAP 0 L	07
MIC07 ENC UTRAP 1 L	07
MIC07 ENC UTRAP 2 L	07
MIC07 FORCE MA 09 H	07,03
MIC07 GEN DEST INH L	04,07
MIC07 GRANT STALL L	18,06,07
MIC07 INHIBIT CMI H	07
MIC07 PROC INIT H	04,07
MIC07 PTE CHK OR PROBE H	07
MIC07 SNAPSHOT CMI L	06,07,01,02
MIC07 STATUS 0 H	07
MIC07 STATUS 1 H	07
MIC07 STATUS VALID L	04,07,06
MIC07 UTRAP L	18,04,07,06
MIC07 WR BUS ERR INT L	04,07
MIC07 WRITE VECT OCC L	06,07
MIC08 CA TAG 12 H	12,11,08
MIC08 CA TAG 13 H	12,11,08
MIC08 CA TAG 14 H	12,11,08
MIC08 CA TAG 15 H	12,11,08
MIC08 CA TAG 16 H	12,11,08
MIC08 CA TAG 17 H	11,12,08

NOTES:
1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS		
CHK	CHANGE NO.	REV

SIGNAL NAME	PAGE NUMBER(S)
MIC08 CA TAG 18 H	11,12,08
MIC08 CA TAG 19 H	11,12,08
MIC08 CA TAG 20 H	11,12,08
MIC08 CA TAG 21 H	11,12,08
MIC08 CA TAG 22 H	11,12,08
MIC08 CA TAG 23 H	11,12,08
MIC08 CA TAG PAR OUT H	12,08
MIC08 CA VALID H	11,12,08
MIC09 CA 16 H	09
MIC09 CA 17 H	09
MIC09 CA 18 H	09
MIC09 CA 19 H	09
MIC09 CA 20 H	09
MIC09 CA 21 H	09
MIC09 CA 22 H	09
MIC09 CA 23 H	09
MIC09 CA 24 H	09
MIC09 CA 25 H	09
MIC09 CA 26 H	09
MIC09 CA 27 H	09
MIC09 CA 28 H	09
MIC09 CA 29 H	09
MIC09 CA 30 H	09
MIC09 CA 31 H	09
MIC09 CA B2 PAR OUT H	13,09
MIC09 CA B3 PAR OUT H	13,09
MIC10 CA 00 H	10
MIC10 CA 01 H	10
MIC10 CA 02 H	10
MIC10 CA 03 H	10
MIC10 CA 04 H	10
MIC10 CA 05 H	10
MIC10 CA 06 H	10
MIC10 CA 07 H	10
MIC10 CA 08 H	10
MIC10 CA 09 H	10
MIC10 CA 10 H	10
MIC10 CA 11 H	10
MIC10 CA 12 H	10
MIC10 CA 13 H	10
MIC10 CA 14 H	10
MIC10 CA 15 H	10
MIC10 CA B0 PAR OUT H	13,10
MIC10 CA B1 PAR OUT H	13,10
MIC11 B PAD 02 H	10,09,11
MIC11 B PAD 03 H	10,09,11
MIC11 B PAD 04 H	10,09,11
MIC11 B PAD 05 H	10,09,11
MIC11 B PAD 06 H	10,09,11
MIC11 B PAD 07 H	10,09,11

SIGNAL NAME	PAGE NUMBER(S)
MIC11 B PAD 08 H	10,09,11
MIC11 B PAD 09 H	10,09,11
MIC11 B PAD 10 L	10,09,11
MIC11 B PAD 11 L	10,09,11
MIC11 CA WRITE ENA L	10,09,11,08
MIC11 ENA CACHE H	09,10,11
MIC11 ENA CACHE L	13,09,10,11
MIC11 MI B CLK H	11,16
MIC12 CA TAG PAR ERR H	12,06,11
MIC12 CA TAG PAR IN H	12,08
MIC13 CA B0 PAR IN H	13,10
MIC13 CA B0 PAR L	13
MIC13 CA B0 PERR H	13
MIC13 CA B1 PAR IN H	13,10
MIC13 CA B1 PAR L	13
MIC13 CA B1 PERR H	13
MIC13 CA B2 PAR IN H	09,13
MIC13 CA B2 PAR L	13
MIC13 CA B2 PERR H	13
MIC13 CA B3 PAR IN H	13,09
MIC13 FORCE CACHE PE H	13,11
MIC13 CA B3 PAR L	13
MIC13 CA B3 PERR H	13
MIC13 CA DATA PAR ERR L	13,06,11
MIC14 T0 TAG 16 H	14,17,16
MIC14 T0 TAG 17 H	14,17,16
MIC14 T0 TAG 18 H	14,17,16
MIC14 T0 TAG 19 H	14,17,16
MIC14 T0 TAG 20 H	14,17,16
MIC14 T0 TAG 21 H	14,17,16
MIC14 T0 TAG 22 H	14,17,16
MIC14 T0 TAG 23 H	14,17,16
MIC14 T0 TAG 24 H	14,17,16
MIC14 T0 TAG 25 H	14,16,17
MIC14 T0 TAG 26 H	14,16,17
MIC14 T0 TAG 27 H	14,16,17
MIC14 T0 TAG 28 H	14,16,17
MIC14 T0 TAG 29 H	14,16,17
MIC14 T0 TAG 30 H	14,16,17
MIC14 T0 TAG PAR OUT L	14,17
MIC14 T0 VALID H	14,16,17
MIC14 T1 TAG 16 H	14,17,16
MIC14 T1 TAG 17 H	14,17,16
MIC14 T1 TAG 18 H	14,17,16
MIC14 T1 TAG 19 H	14,17,16
MIC14 T1 TAG 20 H	14,17,16
MIC14 T1 TAG 21 H	14,17,16
MIC14 T1 TAG 22 H	14,17,16
MIC14 T1 TAG 23 H	14,17,16
MIC14 T1 TAG 24 H	14,17,16
MIC14 T1 TAG 25 H	14,16,17

SIGNAL NAME	PAGE NUMBER(S)
MIC14 T1 TAG 26 H	14,16,17
MIC14 T1 TAG 27 H	14,16,17
MIC14 T1 TAG 28 H	14,16,17
MIC14 T1 TAG 29 H	14,16,17
MIC14 T1 TAG 30 H	14,16,17
MIC14 T1 TAG PAR OUT L	14,17
MIC14 T1 VALID H	14,16,17
MIC15 T0 PAR OUT 0 H	15,16
MIC15 T0 PAR OUT 1 H	15,16
MIC15 T0 PAR OUT 2 H	15,16
MIC15 T0 TB AC 0 H	15,16
MIC15 T0 TB AC 1 H	15,16
MIC15 T0 TB AC 2 H	15,16
MIC15 T0 TB AC 3 H	15,16
MIC15 T0 TB DATA 09 H	16,15
MIC15 T0 TB DATA 10 H	16,15
MIC15 T0 TB DATA 11 H	16,15
MIC15 T0 TB DATA 12 H	15,16
MIC15 T0 TB DATA 13 H	16,15
MIC15 T0 TB DATA 14 H	16,15
MIC15 T0 TB DATA 15 H	16,15
MIC15 T0 TB DATA 16 H	15,16
MIC15 T0 TB DATA 17 H	16,15
MIC15 T0 TB DATA 18 H	16,15
MIC15 T0 TB DATA 19 H	16,15
MIC15 T0 TB DATA 20 H	15,16
MIC15 T0 TB DATA 21 H	16,15
MIC15 T0 TB DATA 22 H	16,15
MIC15 T0 TB DATA 23 H	16,15
MIC15 T0 TB M BIT H	15,16
MIC15 T1 PAR OUT 0 H	15,16
MIC15 T1 PAR OUT 1 H	15,16
MIC15 T1 PAR OUT 2 H	15,16
MIC15 T1 TB AC 0 H	15,16
MIC15 T1 TB AC 1 H	15,16
MIC15 T1 TB AC 2 H	15,16
MIC15 T1 TB AC 3 H	15,16
MIC15 T1 TB DATA 09 H	16,15
MIC15 T1 TB DATA 10 H	16,15
MIC15 T1 TB DATA 11 H	16,15
MIC15 T1 TB DATA 12 H	15,16
MIC15 T1 TB DATA 13 H	16,15
MIC15 T1 TB DATA 14 H	16,15
MIC15 T1 TB DATA 15 H	16,15
MIC15 T1 TB DATA 16 H	15,16
MIC15 T1 TB DATA 17 H	16,15
MIC15 T1 TB DATA 18 H	16,15
MIC15 T1 TB DATA 19 H	16,15
MIC15 T1 TB DATA 20 H	15,16
MIC15 T1 TB DATA 21 H	16,15

NOTES:
1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS		
CHK	CHANGE NO.	REV

digital	DRN.	DATE 15-MAY-84	ENG.	DATE	TITLE: MIC FORWARD REFERENCE
	CHK'D.	DATE	BOARD LOCATION: AC3		SHEET 1 OF 1
DSKB:<DAME>MIC21.DRW 15-MAY-84 11:17			NEXT HIGHER ASSEMBLY:		SIZE K / CODE CS / NUMBER L0003-0-21 / REV. C
FIRST USED ON OPTION/MODEL: 11/750			B-DD-L0003-0-0		

SIZE K CODE CS NUMBER L0003-0-21 REV. C

SIGNAL NAME	PAGE NUMBER(S)
MIC15 T1 TB DATA 22 H	16,15
MIC15 T1 TB DATA 23 H	16,15
MIC15 T1 TB M BIT H	15,16
MIC16 AC 0 H	05,16,17,07
MIC16 AC 1 H	05,16,17,07
MIC16 AC 2 H	05,16,17,07
MIC16 AC 3 H	05,16,17,07
MIC16 M BIT H	05,16,17,07
MIC16 T0 WRITE ENA L	15,16,14
MIC16 T1 WRITE ENA L	15,16,14
MIC16 TB HIT 1 L	16
MIC16 TB PAR OUT 0 L	16,17
MIC16 TB PAR OUT 1 L	16,17
MIC16 TB PAR OUT 2 L	16,17
MIC16 TB VALID H	16,07
MIC17 T TAG PAR IN H	14,17
MIC17 TB DATA PERR 0 H	15,04,17
MIC17 TB DATA PERR 0 L	17
MIC17 TB DATA PERR 1 H	15,04,17
MIC17 TB DATA PERR 1 L	17
MIC17 TB DATA PERR 2 H	15,04,17
MIC17 TB DATA PERR 2 L	17
MIC17 TB DATA PERR H	17,07,16
MIC17 TB TAG 0 PERR H	07,17,16
MIC17 TB TAG 1 PERR H	07,17,16
MIC18 B CLK L	18,06,04,05,11,07,01,02,03
MIC18 INH LATCH MA H	06,18
MIC18 INTERRUPT INH H	18
MIC18 LATCHED UTRAP H	18,04
MIC18 MIC LD OSR L	18,04,06
MIC18 X STALL H	18,04
MIC18 X STALL L	18,04
MICRO VECTOR 0 H	04,07
MICRO VECTOR 1 H	04,07
MICRO VECTOR 2 H	04,07
MICRO VECTOR 3 H	04,07
PAD 02 H	11,08,01
PAD 03 H	15,11,05,16,08,01
PAD 04 H	15,11,05,16,08,02
PAD 05 H	15,11,05,16,08,02
PAD 06 H	15,11,05,16,08,02
PAD 07 H	15,11,05,16,08,02
PAD 08 H	11,05,16,14,08,01,17
PAD 09 H	16,15,11,17,08,01
PAD 10 H	11,16,15,17,08,01
PAD 11 H	16,15,11,17,08,01
PAD 12 H	12,15,16,17,11,08,02
PAD 13 H	12,16,15,17,11,08,02
PAD 14 H	12,16,15,17,11,08,02
PAD 15 H	12,16,15,17,11,08,02
PAD 16 H	15,12,16,17,11,08,01

SIGNAL NAME	PAGE NUMBER(S)
PAD 17 H	16,15,12,17,11,08,01
PAD 18 H	16,15,05,12,17,11,08,01
PAD 19 H	16,15,05,12,17,11,08,01
PAD 20 H	15,05,16,12,17,11,08,02
PAD 21 H	16,15,05,12,17,11,08,02
PAD 22 H	16,15,05,12,17,11,08,02
PAD 23 H	16,15,05,12,17,11,08,02
RDM V CLOCK H	04
RDM V LOAD H	04
SCND UB H	05
TB HIT 0 H	05,07,06,16
TB HIT 1 H	16,05,07,06
UBI03 FORCE CACHE PE L	13,12
UBI03 FORCE TB PE L	17
UBI03 RTUT DINH L	04,07,06
UBI12 CMI UB INH L	04
UBI13 MSEQ INIT L	07,06
UBI14 UB INT GRANT H	07
WBUS 00 H	01,03
WBUS 01 H	03,01
WBUS 02 H	03,01
WBUS 03 H	03,01
WBUS 04 H	03,02
WBUS 05 H	02,03
WBUS 06 H	03,02
WBUS 07 H	03,02
WBUS 08 H	01,03
WBUS 09 H	03,01
WBUS 10 H	03,01
WBUS 11 H	01,03
WBUS 12 H	03,02
WBUS 13 H	02,03
WBUS 14 H	03,02
WBUS 15 H	02,03
WBUS 16 H	01,03
WBUS 17 H	01,03
WBUS 18 H	03,01
WBUS 19 H	01,03
WBUS 20 H	02,03
WBUS 21 H	02,03
WBUS 22 H	03,02
WBUS 23 H	02,03
WBUS 24 H	06,07,01,03
WBUS 25 H	06,07,01,03
WBUS 26 H	06,07,01,03
WBUS 27 H	06,07,01,03
WBUS 28 H	02,03
WBUS 29 H	02,03
WBUS 30 H	02,03
WBUS 31 H	02,03

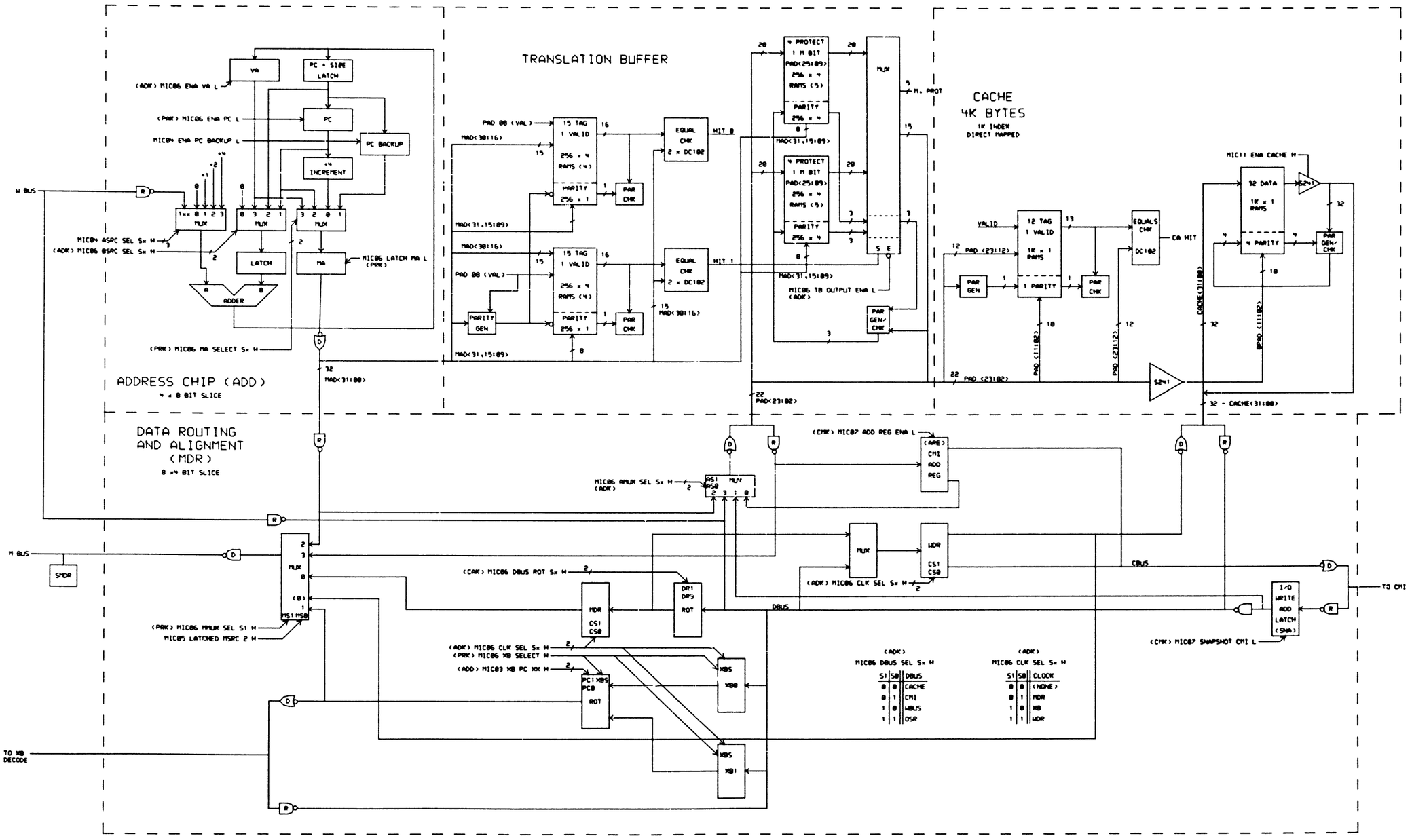
SIGNAL NAME	PAGE NUMBER(S)
XBUF 08 H	01
XBUF 09 H	01
XBUF 10 H	01
XBUF 11 H	01
XBUF 12 H	02
XBUF 13 H	02
XBUF 14 H	02
XBUF 15 H	02

NOTES:
1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS		
CHK	CHANGE NO.	REV

DRN.	DATE 15-MAY-84	ENG.	DATE	TITLE: MIC FORWARD REFERENCE	
CHK'D.	DATE	BOARD LOCATION: AC3			
DSKB:<DAME>MIC22.DRW 15-MAY-84 11:21		SHEET 1 OF 1	NEXT HIGHER ASSEMBLY:		
FIRST USED ON OPTION/MODEL: 11/750		B-DD-L0003-0-0			

SIZE	CODE	NUMBER	REV.
K	CS	L0003-0-22	D



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN.	DATE 12-NOV-80	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: SHEET 1 OF 1	
[160,1271]MICBD.DRW 06-NOV-80 18:41		NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL: 11/750		B-DD-L0003-0-0	

TITLE: MIC BLOCK DIAGRAM

SIZE	CODE	NUMBER	REV.
D	BD	L0003-0-23	C

COMETCHIPS, [160,1271]MICBD.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS MICBD.PLO[160,1271] 12-NOV-80 15:46

SIZE	CODE	NUMBER	REV.
B	DD	L0004-C	K

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
			MODULE REVISION	C D E F H J K
B-DD-L0004-C	2		UBI DRAWING DIRECTORY	C D E F H J K
E-UA-L0004-C-0	2		UBI UNIT ASSEMBLY	C D E F H J K
K-PL-L0004-C-DBP	4		UBI PARTS LIST	C C D E E F H
E-MD-5013827-C-0	6		UBI DRILL & ETCH DRAWINGS	C D D D D E E
		5013827	ETCHED BOARDS	D D D D D EP2 EP2
K-PC-L0004-C-DBC			UBI PC DESIGN DATA BASE CALDEC	D D D D D EP2 EP2
E-EC-5013827-C-0	3		UBI ETCH CUT DRAWINGS	C D E F H J K
K-CS-L0004-C-DBS			UBI DESIGN DATA BASE SUDS	C D E F H J K
D-CS-L0004-C-1	1	*	TOY OFFSET MEMORY	C C C D D D E
D-CS-L0004-C-2	1	*	TIME OF YEAR CLOCK	C C C C C D D
D-CS-L0004-C-3	1	*	LATCH-PAR-GEN HELP- SIGNALS	C C C D D E E
D-CS-L0004-C-4	1	*	UBUS RESISTOR PACKS	C C C C C C D
D-CS-L0004-C-5	1	*	CUI - UBUS ADDRESS 1 OF 2	C C C C C C C
D-CS-L0004-C-6	1	*	CUI - UBUS ADDRESS 2 OF 2	C C C C C C C
D-CS-L0004-C-7	1	*	DATA PATH	C C C C C C C
D-CS-L0004-C-8	1	*	CUI MAP	C C C C C C D
D-CS-L0004-C-9	1	*	CUI MAP DECODE	C C C C C C C
D-CS-L0004-C-10	1	*	CONTROL LOGIC	C C C C D D E
D-CS-L0004-C-11	1	*	CUI CONTROL ROM	C C C C C C D
D-CS-L0004-C-12	1	*	CONSOLE INTERFACE	C D D D D D D
D-CS-L0004-C-13	1	*	UBUS CONTROL	C C C D D D D
D-CS-L0004-C-14	1	*	AC - DC LO MSEQ INIT	C C C C C C C
D-CS-L0004-C-15	1	*	INT & ID LOGIC ROM INTERFACE	C C D E F H H
D-CS-L0004-C-16	1	*	FORWARD REFERENCE	C C C D D D D

NOTES:

* CONTROL SOURCE IS THE SUDS DATA BASE
NO CONTROLLED PAPER ORIGINALS EXIST

ALL DOCUMENTATION WAS RELEASED AT REVISION 'C'

REVISIONS								
REV.		D	E	F	H	J	K	
CHG NO.		TW001	TW002	TW003	TW004	TW005	TW006	
DATE		6-80	9-80	6-81	7-81	11-81	5 83	

digital

USED ON OPTION/MODEL: 11/750

DRN. J. CASEY
CHK'D J.CASEY
ENG. S. SMITH
PROD. V. PARKER

TITLE: UBI

SIZE	CODE	NUMBER	REV.
B	DD	L0004-0	K

SHEET 1 OF 3

DRB 126

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS						
D-CS-L0004-0-17	1	*	FORWARD REFERENCE	C	c	C	D	D	D	E
D-CS-L0004-0-18	1	*	FORWARD REFERENCE	C	D	D	E	F	F	H
D-CS-L0004-0-19	1	*	FORWARD REFERENCE	C	c	C	C	C	C	C
D-BD-L0004-0-20	1		UBI BLOCK DIAGRAM	C	c	C	C	C	C	C
K-MP-L0004-0-21	26		UBI MICROCODE LISTING	C	c	C	C	C	C	C
K-MC-L0004-0-0			UBI MICROCODE TAPE	C	c	C	C	C	C	C

NOTES: * CONTROL SOURCE IS THE SUPS DATA BASE
NO CONTROLLED PAPER ORIGINALS EXIST

ALL DOCUMENTATION WAS RELEASED AT REVISION 'C'

REVISIONS: REV. / CHG NO. / DATE

digital

USED ON OPTION/MODEL: 11/750

DRN. J. CASEY
CHK'D J. CASEY
ENG. S. SMITH
PROD. V. PARKER

TITLE: UBI

SIZE B | CODE DD | NUMBER L0004-0 | REV. K

SHEET 2 OF 3

DRB 126

SIZE	CODE	NUMBER	REV.
B	DD	L0004-0	K

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
E-UA-L0004-0-0	2		UBI UNIT ASSEMBLY	HI
K-PL-L0004-0-DBP	3		UBI PARTS LIST	EI
E-EC-5013827-0-0	3		UBI ETCH CUT DRAWINGS	HI
K-CS-L0004-0-DBS			UBI DESIGN DATA BASE SUDS	HI
D-CS-L0004-0-1	1	*	TOY OFFSET MEMORY	DI
D-CS-L0004-0-2	1	*	TIME OF YEAR CLOCK	CI
D-CS-L0004-0-3	1	*	LATCH-PAR-GEN HELP-SIGNALS	DI
D-CS-L0004-0-4	1	*	UBUS RESISTOP PACKS	CI
D-CS-L0004-0-5	1	*	CUI-UBUS ADDRESS 1 OF 2	CI
D-CS-L0004-0-6	1	*	CUI-UBUS ADDRESS 2 OF 2	CI
D-CS-L0004-0-7	1	*	DATA PATH	CI
D-CS-L0004-0-8	1	*	CUI MAP	CI
D-CS-L0004-0-9	1	*	CUI MAP DECODE	CI
D-CS-L0004-0-10	1	*	CONTROL LOGIC	DI
D-CS-L0004-0-11	1	*	CUI CONTROL ROM	CI
D-CS-L0004-0-12	1	*	CONSOLE INTERFACE	DI
D-CS-L0004-0-13	1	*	UBUS CONTROL	DI
D-CS-L0004-0-14	1	*	AC-DC LO MSEQ INIT	CI
D-CS-L0004-0-15	1	*	INT AND ID LOGIC ROM INTERFACE	FI
D-CS-L0004-0-16	1	*	FORWARD REFERENCE	DI
D-CS-L0004-0-17	1	*	FORWARD REFERENCE	DI
D-CS-L0004-0-18	1	*	FORWARD REFERENCE	FI
D-CS-L0004-0-19	1	*	FORWARD REFERENCE	CI

NOTES:

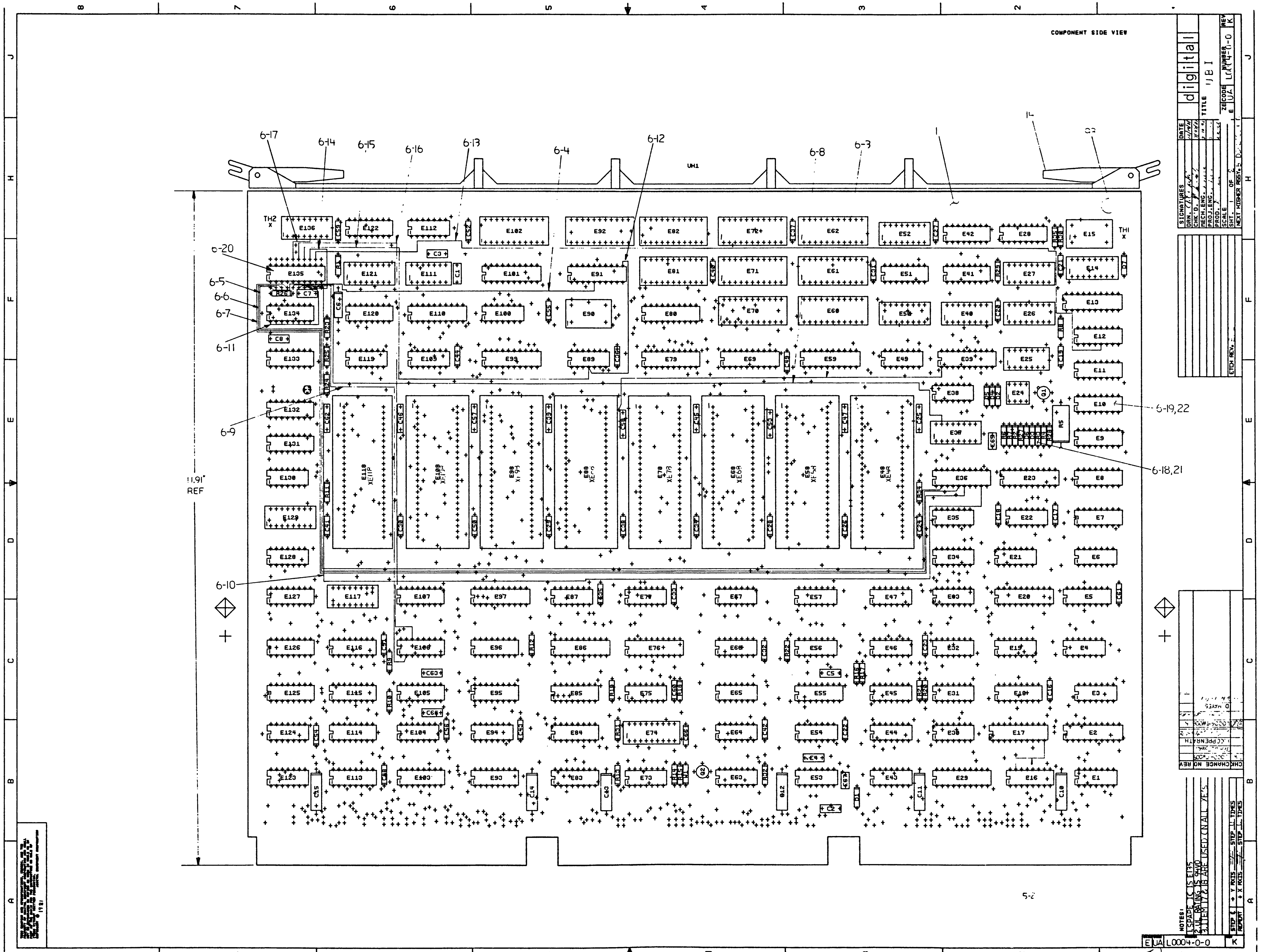
*CONTROL SOURCE IS THE SUDS DATA BASE
NO CONTROLLED PAPER ORIGINALS EXIST

REVISIONS: REV. | CHG NO. | DATE

digital

USED ON OPTION/MODEL		DRN.			TITLE
11/750		B. PELLICCIA	26APR84		U.B.I.
		CHK'D J. CASEY			SIZE B | CODE DD | NUMBER L0004-0 | REV. K
		ENG. S. SMITH			SHEET 3 OF 3
		PROD. V. PARKER			

DRB 126


COMPONENT SIDE VIEW
digital
L0004-0-0
K
11.91"
REF
6-17
6-14
6-15
6-16
6-13
6-4
6-12
6-8
6-3
6-20
6-5
6-6
6-7
6-11
6-9
6-10
6-19,22
6-18,21
TH1
TH2
5-2

REWORK INSTRUCTIONS
WIRE ADDS ECO#5
5-2 E16-15 TO E17-10

REWORK INSTRUCTIONS
WIRE ADDS ECO#6

6-3 E39-1 TO PTH LEFT OF TOP LEAD OF C58
6-4 E91-5 TO E135-1
6-5 E36-2 TO E135-2
6-6 E36-5 TO E135-3
6-7 E36-6 TO E135-4
6-8 E37-15 TO E135-5
6-9 E106-2 TO E135-6
6-10 E36-9 TO E135-7
6-11 E134-1 TO E135-8
6-12 E91-11 TO E89-4
6-13 E12-5 TO E135-12
6-14 E135-8 TO E135-13
6-15 E89-4 TO E135-14
6-16 E106-14 TO E135-15
6-17 E136-5 TO E135-16

COMPONENT DELETES ECO#6

6-18 1300447; AT R3
6-19 23527A2-00; AT E10

COMPONENT ADDS ECO#6 (SIDE 1)

6-20 23991A9; AT E135 SHIFTED LEFT
6-21 1300365-00; AT R3
6-22 23645A2-00; AT E10

REVISION HISTORY

DATE	ECO NUMBER	REV

TITLE UBI

DOCUMENT NUMBER: SIZE E | CODE JA | NUMBER L0004-0-0 | REV K
SCALE 2/1 | SHEET 2 OF 2

TW

AUTOMATED BY PRTLST.4Q(50)

P A R T S L I S T

LINE	ITEM	TOP DOCUMENT	PART NUMBER	MIN REV	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
					VARIATION REVISION LEVEL:		
1	1	E-MD-5013827-0-0	5013827-00		CIRCUT BOARD (PCS)	1	
2	2		1000019-00		150.0 MMF 100V 5%200PPM MICA	1	C8
3	3		1000023-00		330.0 MMF 100V 5%200PPM MICA	4	C1-C4
4	4		1000024-00		470.0 MMF 100V 5%200PPM MICA	1	C5
5	5		1000043-00		1000.0 MMF 250V 20% Y5F DISC	2	C63,C64
6	6	SEE NOTES	1012084-01		8 MFD 25V +75-10% AL EL	6	C10-C15
7	7		1009964-00		.68 MFD 35V 10% S.TANT	1	C6
8	8		1010978-40		.22 MFD 50V 10% CER	1	C65
9	9		1012784-00		.047 MFD 50V +80-20% CER	48	C16-C62,C66
10	10		1010978-24		.01 MFD 50V 10% CER	2	C9,C67
11	11		1104860-00		VZ= 3.3 5% 400 MW 1N746A	1	D1
12	12		1105796-00		PIV= 400 IO= 1.00A 1N4004 DO-41	4	D2-D5
13	13		1105871-01		VZ= 3.0 1% 250 MW	1	D6
14	14		1210711-02		/REPLACED BY 12-16988-02	1	
15	15		1211164-04		*** THIS ITEM IS NOT USED ***	-	
16	16		1215924-00		SKT,IC 48PIN DIP GOLD FOR	8	XE48,XE58,XE68,XE78,XE88,XE98,
						CONT	XE108,XE118
17	17		1215935-00		GASKET,THERMAL SILICONE	8	
18	18		1215936-00		HEAT SINK, 2.200X.585	8	
19	19		1300005-04		R NETWORK 15-470 5.0 % 16PIN	1	E37
20	20		1300005-07		R NETWORK 15-4.7K 5.0 % 16PIN	1	E40
21	21		1300316-00		470.0 .25 W 5.0 % CF	1	R20
22	22		1300365-00		1.0 K .25 W 5.0 % CF	15	R1,R8,R12-R19,R22,R29,R30,R31,R3
23	23		1300398-00		1.80 K .25 W 5.0 % CF	2	R4,R28
24	24		1300432-00		3.0 K .25 W 5.0 % CF	1	R11
25	25		1300447-00		4.70 K .25 W 5.0 % CF	1	R2
26	26		1302394-00		30.0 K .25 W 5.0 % CF	1	R23
27	27		1305346-00		27.0 K .25 W 5.0 % CF	1	R25
28	28		1301322-00		180.0 .25 W 5.0 % CF	1	R21
29	29		1301423-00		*** THIS ITEM IS NOT USED ***	-	

REVISION HISTORY			
ENG	ECO NUMBER	REV	
---	INITIAL	C	
TK	L0004-TW002	D	
D L	L0004-TW003	E	
LL	TW005	F	
DH	TW006	H	

BASIC PART NO: L0004

SECTION A OF A

SECTION.VARIATION INDEX
- [A] 00
- [B]
- [C]
- [D]
- [E]
- [F]
- [H]
- [J]
- [K]
- [L]
- [M]
- [N]

DRN: K.FRIEDGEN — DATE: 04-MAY-79

CHK'D: E.T.GERRY — DATE: 04-MAY-79

DES.ENG: S.SMITH — DATE: 04-MAY-79

RESP.ENG.: S.SMITH — DATE: 04-MAY-79

MFG.ENG.: VANCE PARKER — DATE: 8-FEB-80

ASSEMBLY NUMBER: E-UA-L0004-0-0

TOP DOCUMENT NUMBER: #B-DD-L0004-0

D I G I T A L

TITLE PARTS LIST
U.B.I.

DOCUMENT NUMBER

SIZE	CODE	NUMBER	REV
K	PL	L0004-0-DBP	H

RELEASE DATE: 04-SEP-84

FILE NAME: Z1256H.PLS

EDIT #: 24

LINE	ITEM	TOP DOCUMENT	PART NUMBER	MIN REV	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
					VARIATION REVISION LEVEL:		
30	30		1301571-00		68.0 1.0 W 5.0 % CC	1	R5
31	31		1304838-00		43.0 K .25 W 5.0 % CF	1	R24
32	32		1302514-00		39.0 K .25 W 5.0 % CF	1	R26
33	33		1305125-00		383.0 .25 W 1.0 % RN55D-F10	2	R9,R10
34	34		1312628-00		R NETWORK 14-176.5 14-375 16PIN	2	E93,E114
35	35		1312628-01		R NETWORK 14-176.5 11-375 16PIN	2	E103,E113
36	36		1509649-01		3762 PNP 4W SI 40 35	1	Q1
37	37		1811660-23		OSCILLATOR, XTAL 5.5296 MHZ	1	E90
38	38		1813951-00		OSCILLATOR, XTAL 1.0 KHZ	1	E15
39	39		1909705-00		DEC 8881 NAND GATE-QUAD 2IN 0	2	E94,E123
40	40		1910322-00		DEC 1488L DRIVER,LINE,QUAD,EI	1	E111
41	41		1910323-00		DEC 1489L RECEIVER,LINE,QUAD,	1	E53
42	42		1910436-00		DEC 74123 ONE SHOT-DUAL,RETRIG	2	E133,E134
43	43		1910532-00		74S00 NAND GATE-QUAD 2IN	4	E30,E66,E77,E100
44	44		1910533-00		74S03 NAND GATE-QUAD 2IN,O	1	E45
45	45		1910534-00		74S04 INVERTER GATE-HEX 1I	3	E21,E31,E87
46	46		1910535-00		74S05 INVERTER GATE-HEX 1	1	E22
47	47		1910536-00		74S10 NAND GATE-TRIPLE 3IN	3	E19,E65,E89
48	48		1910539-00		74S20 NAND GATE-DUAL 4INPU	2	E75,E109
49	49		1910544-00		74S74 FF-D DUAL,EDGE TRIGG	5	E4,E32,E44,E67,E119
50	50		1910550-00		74S174 FF-D HEX	1	E127
51	51		1910957-00		74S175 FF-D QUAD COMMON CLO	3	E5,E55,E132
52	52		1911469-00		DEC 8640 RECEIVER,BUS,QUAD,U	2	E104,E124
53	53		1911573-00		74S280 PARITY GEN/CHKR,9BIT	1	E3
54	54		1911579-00		8641 TRANSCEIVER,BUS,QUA	11	E83-E85,E95,E96,E105,E106,E115,
						CONT	E116,E125,E126
55	55		1911641-00	SN	74S257 MUX,QUAD 2 TO 1	4	E107,E120,E122,E131
56	56		1911675-00		74S138 DECODER/DEMUX 3-8 LI	1	E18
57	57		1911712-00		74S51 AND-OR GATE-INVERT D	1	E54
58	58		1912388-00		74S02 NOR GATE-QUAD 2IN,PO	4	E47,E57,E64,E130
59	59		1912389-00		74S08 AND GATE-QUAD 2IN,PO	2	E35,E46
60	60		1912646-00		LS253 MUX 1 OF 4 (DUAL)	4	E28,E41,E42,E51
61	61		1912799-00		LS00 NAND-GATE-QUAD 2IN,P	2	E73,E128
62	62		1912810-00		LS20 NAND GATE-DUAL 4IN	1	E34
63	63		1912812-00		LS22 NAND GATE-DUAL 4IN,P	1	E49
64	64		1912815-00		LS30 NAND GATE-SINGLE 8IN	1	E43
65	65		1912827-00		LS83 ADDERS-4BIT	4	E117,E121,E129,E136
66	66		1912863-00		LS273 FF-D OCTAL W/CLEAR	1	E39
67	67		1913340-00		74S32 OR GATE-QUAD 2IN	1	E33
68	68		1913493-00		74S241 OCTAL BUFFER,TRI-STA	1	E76
69	69		1913671-00		74S374 FF-D,OCTAL,TRI STATE	7	E2,E13,E17,E20,E23,E29,E36
70	70		1912839-00		LS133 NAND GATE-POS	1	E16
71	71		1914085-00		74S260 NOR GATE-DUAL,POS	1	E1
72	72		1914156-00	LM	393 VOLT.COMPARATOR DUAL	1	E24
73	73		1914451-00		LS393 COUNTER,BINARY,4BIT	3	E6,E63,E112
74	74		1914558-00	SN	74S132N NAND GATE QUAD 2IN P	1	E56
75	75		1914685-00	DC	611B BIPOLAR,LS,400-GATE	2	E108,E118
76	76		1914692-00	DC	618C BIPOLAR,LS,400-GATE	4	E58,E68,E78,E88

DIGITAL	TITLE U.B.I.	SECTION A OF A	SIZE K	CODE PL	DOCUMENT NUMBER LO004-0-DBP	REV H

LINE	ITEM	TOP DOCUMENT	PART NUMBER	MIN REV	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
					VARIATION REVISION LEVEL:		
77	77		1914693-00	DC	619D BIPOLAR,LS,400-GATE	1	E48
78	78		1914704-00	DC	630B BIPOLAR,LS,400-GATE	1	E98
79	79		1915193-00		LS244 DRIVER,LINE,OCTAL,T	9	E59,E69,E79,E80,E86,E97,E99,
						CONT	E101,E110
80	80		1915697-00		RAM 256X4 TRI-STATE	10	E60-E62,E70-E72,E81,E82,E92,E102
81	81		2112623-02		DUAL BAUD RATE GEN/PROG DIVIDER	1	E74
82	82		2113603-00		4001UBNOR GATE-QUAD 2IN CM	1	E25
83	83		2113647-00		4518B COUNTER,DUAL UP BCD	1	E26
84	84		2113653-00		74C89 RAM 64BIT CMOS TRIST	1	E50
85	85		2114462-00		4040B COUNTER/DIVIDER,BINA	3	E14,E27,E52
86	86		23524A2-00		A2-05	1	E7
87	87		23525A2-00		A2-05	1	E8
88	88		23526A2-00		A2-05	1	E9
89	89		23645A2-00		A2-05	1	E10
90	90		23528A2-00		A2-05	1	E11
91	91		23529A2-00		A2-05	1	E12
92	92		23A2 -05		*** THIS ITEM IS NOT USED ***	-	
93	93		9000024-01		EYELET,ROLLED 0.1210DX0.192	12	
94	94		1002476-00		510.0 MMF 100V 5%200PPM MICA	1	C7
95	95		1304835-00		/REPLACED BY 13-05337-00	1	R27
96	96		1305374-00		910.0 .25 W 5.0 % CF	1	R6
97	97		1314187-00		6.19 K .25 W 1.0 % RN55D-F10	1	R7
98	98		1503121-00		2N 2369 NPN 350MW SI N	1	Q2
99	99		9009185-00		JUMPER, WIRE, INSULATED, BLACK B	1	W1
100	100		1302379-00		75.0 .25 W 5.0 % CF	2	R32,R34
101	101		1910542-00		74S64 A-O-I GATE 4-2-3-2	1	E38
102	102		1913670-00		74S373 LATCH,8BIT TRANS TRI	1	E91
103	103		1300202-00		47.0 .25 W 5.0 % CF	1	R35
104	104		1118585-00		VZ= 5.2 400 MW 1N5953	1	D7
105	105		9007200-00		TRANSIPADS #10134	1	XQ1
106	106		23991A9-00		A9-04	1	E135

COMPONENT SIDE VIEW

digital

TITLE: DRILL AND ETCH DRAWING

SIZE: E | CODE IDENT: 80009 | SHEET: 1 OF 5 | REV: J

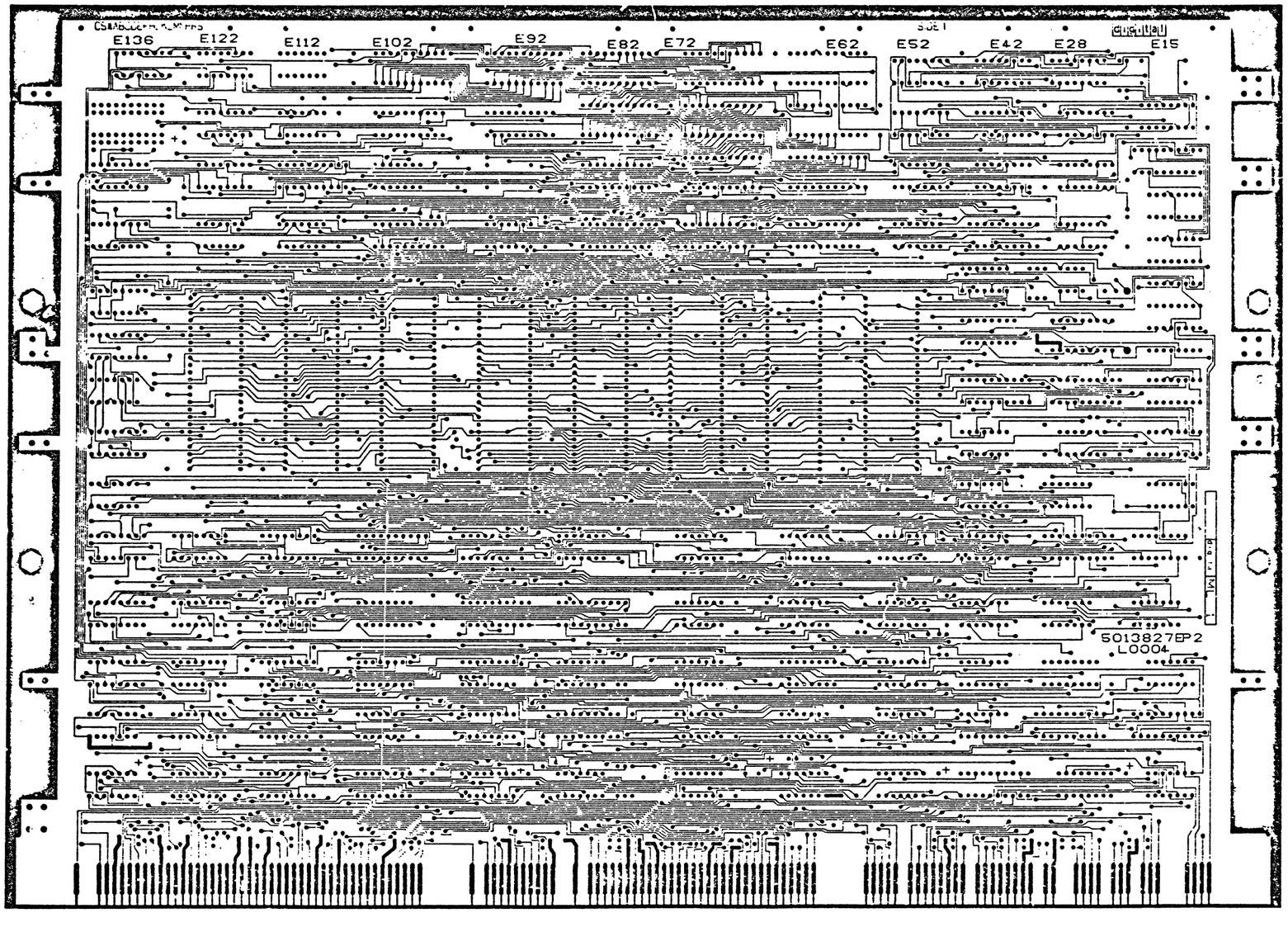
5013827-0-0

BOARD FABRICATION INFORMATION

HOLE DATA

NOTES:

LAYER 1



TITLE	DOCUMENT NUMBER		
DRILL & ETCH DRAWINGS	E HD 5013827-0-0	E	
	SCALE	SHEET	

LAYER 1a

L2

5013827EP2

GND

TITLE	DRILL & ETCH DRAWINGS	DOCUMENT NUMBER		
		EMD	5013827-0-0	E
		SCALE 2:1	SHEET 1 OF 1	

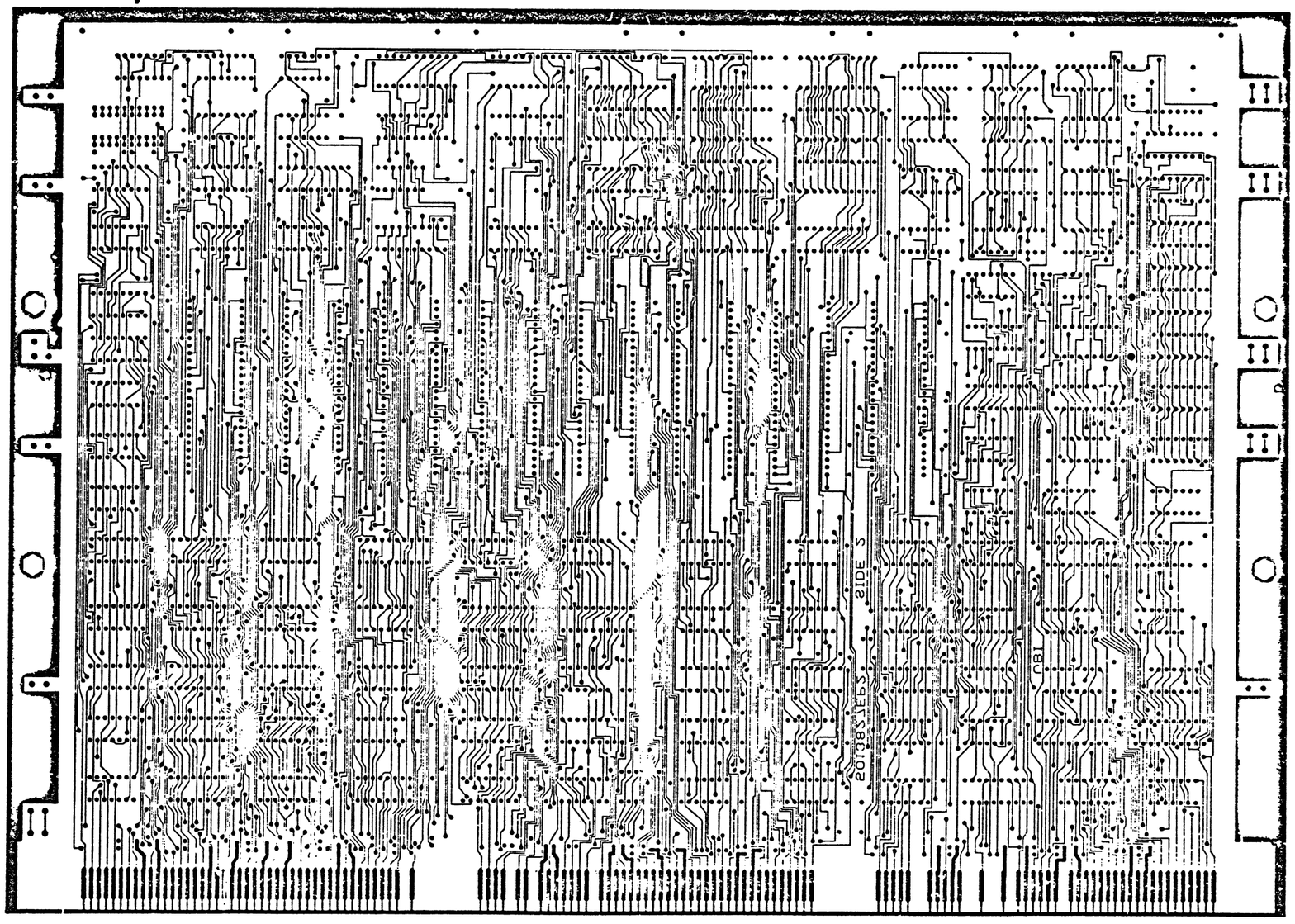
LAYER 3

TITLE DRILL & ETCH DRAWINGS

DOCUMENT NO. 5019627-0-0 E

SHEET 2/1

LAYER 4



TITLE DRILL & ETCH DRAWINGS

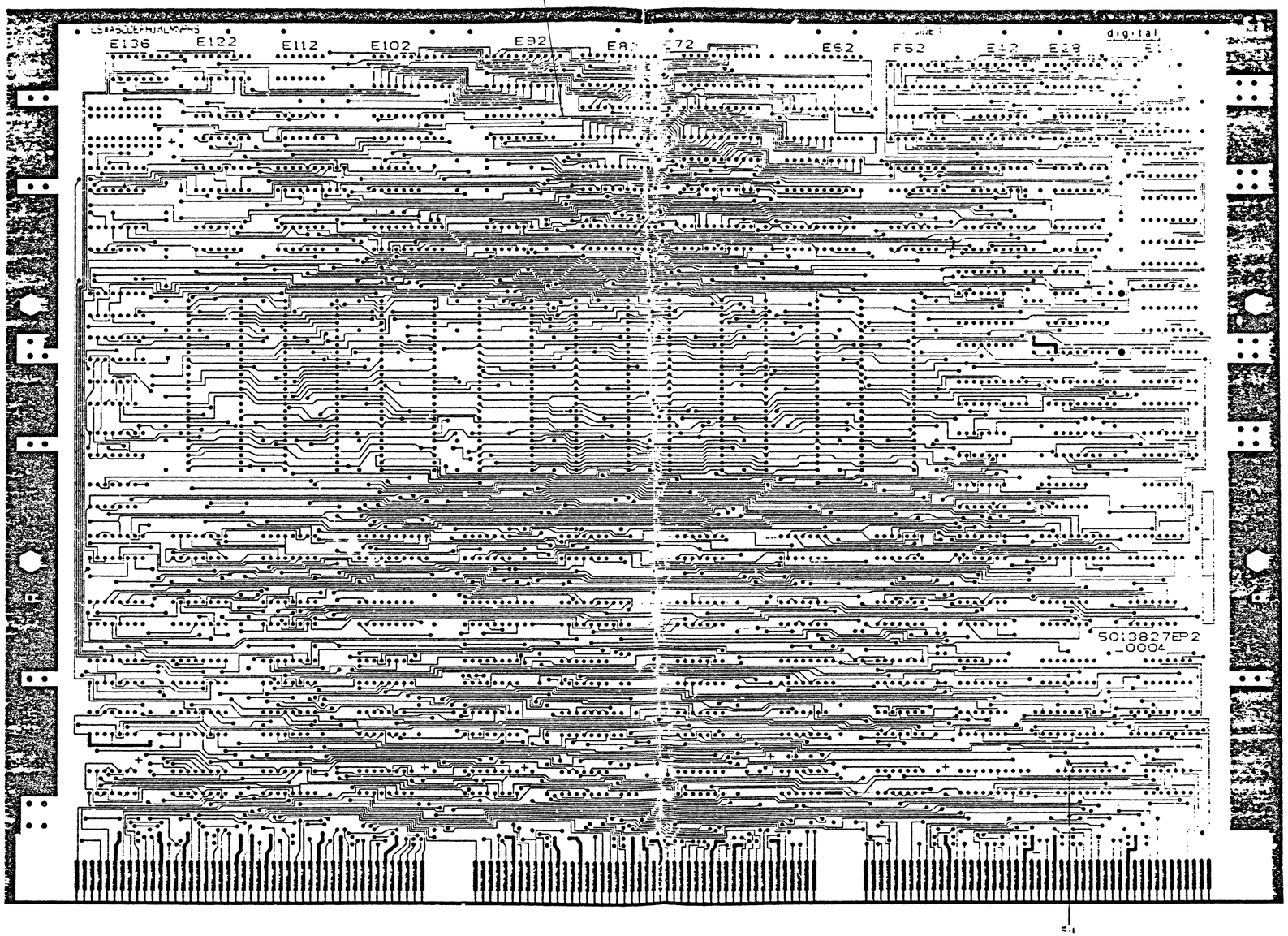
DOCUMENT NO. 5013827-0-0 E

SCALE NONE

SHEET 5 OF 5

5013827-0-0 E

LAYER 1



EES 50138270-0 K

LAYER 4

2of3

EEC50138270-00 K

REWORK ETCH CUT SIDE 1

5-1 ETCH CUT AT E16-15

REWORK INSTRUCTIONS

ECO*6: ETCH CUTS SIDE 1

6-1 CUT ETCH AT E39-1
6-2 CUT ETCH AT E91-11

REVISION HISTORY

DATE	ECO NUMBER	REV

TITLE: ETCH CUT DRAWINGS

DOCUMENT NUMBER: E FC 6013827 00 K

SCALE

SHEET 3 OF 3

NOTE: THE +5V PLANE IS DIVIDED INTO TWO SECTIONS FOR TESTING PURPOSES.
CONNECTOR PINS A20,A38,A58 AND A76 BRING POWER TO E1-E67,E77 AND E87.
CONNECTOR PINS B20,B38,B58,B76,C20,C38,C58,C76 BRING POWER TO E68-E76, E78-E86,E88-E135.
TOY BATTERY +5.0V NOMINAL GOES TO E14,E15,E24,E25,E26,E27,E50,E52 FROM CONNECTOR PIN A40.

TOY BATTERY A40
+5.0V NOMINAL
R2 4.7KΩ
UBUS DCLO L C59
74LS22 E49
+3.0V
UBI01 CPU DC LO H
4001 E25
UBI01 RESET TOY COUNTER H
+5.0V
E40 4.7KΩ
8 D FF 74LS273 E39
GND
UBUS 22 H C18
UBUS 16 H C10
UBUS 17 H C3
UBUS 18 H C8
UBUS 19 H C9
UBUS 20 H C21
UBUS 21 H C40
UBI14 MSEQ INIT L B80
UBI01 COUNTER SEL 1 H
UBI01 COUNTER SEL 0 H
16X4 RAM 74C89 E50
ADR
EN WRITE
B85 WBUS 27 H
C39 WBUS 26 H
C54 WBUS 25 H
C46 WBUS 24 H
74LS244 E69
UBI01 WBUS GET TOY L
UBI01 WCTRL 0XXX0X L
UBI15 WCTRL 3 H
UBI15 WCTRL 2 H
UBI15 WCTRL 0 H
74LS20 E34
74S02 E47
DPM17 M CLK L A63
R3 1KΩ
UBI15 WCTRL 5 H
UBI15 WCTRL 1 H
UBI15 WCTRL 4 H
74S32 E33
74S02 E57
MC14518 E26
UBI01 RESET TOY COUNTER H
UBI01 CPU DC LO H
UBI01 BATT DC LO L
74S04 E21
UBI01 WBUS GET TOY L
+5.0V A20 A38 A58 A76 B20 B38 B58 B76 C20 C38 C58 C76
GND A24 A44 A52 A72 B24 B44 B52 B72 C24 C44 C52 C72
GND A23 A43 A51 A71 B23 B43 B51 B71 C23 C43 C51 C71
+12VDC A2 → +12.0V
-15.0 VDC A91 → -15.0V
+5 VDC
GND
+2.5 VDC B11 B29 B47 B65 B83 C11 C29 C47 C65 C83
C10,11,12,15 8.0μF 25V
C16-24,26-38,40-44,48-52,54-56,59-61 .047μF 50V
C13,14 8.0μF 25V
C25,39,45-47,53,57,58,62 .047μF 100V
+2.5V
LM393 E24
R4 1.8KΩ
R28 1.8KΩ
C65 .22UF 50V
Q1 2N3762
R5 68Ω 1W
D2 1N4004
D4 1N4004
D5 1N4004
D3 1N4004
R27 3.65KΩ 1/4W 1%
R7 6.19KΩ 1/4W 1%
R6 910Ω
D6 1/4M3.0AZ1 3V 1% 1/4W
F40 1.7KΩ
UBI01 BATT DC LO L

REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN.	DATE 24-APR-84	ENG.	DATE	TITLE: TOY OFFSET MEMORY
CHK'D.	DATE	BOARD LOCATION: AC4 SHEET 1 OF 1		
DSKC:<DUVAL>UB01.DRW 24-APR-84 13:28		NEXT HIGHER ASSEMBLY: B-DD-L0004-0-0		SIZE K · CODE CS · NUMBER L0004-0-1 · REV. E
FIRST USED ON OPTION/MODEL: 11/750				

12 BIT COUNTER MC14040
E14
E52
E27
CLR
CLK
LA0102 TOY COUNTER 31 H
LA0102 TOY COUNTER 30 H
LA0102 TOY COUNTER 29 H
LA0102 TOY COUNTER 28 H
LA0102 TOY COUNTER 27 H
LA0102 TOY COUNTER 26 H
LA0102 TOY COUNTER 25 H
LA0102 TOY COUNTER 24 H
LA0102 TOY COUNTER 23 H
LA0102 TOY COUNTER 22 H
LA0102 TOY COUNTER 21 H
LA0102 TOY COUNTER 20 H
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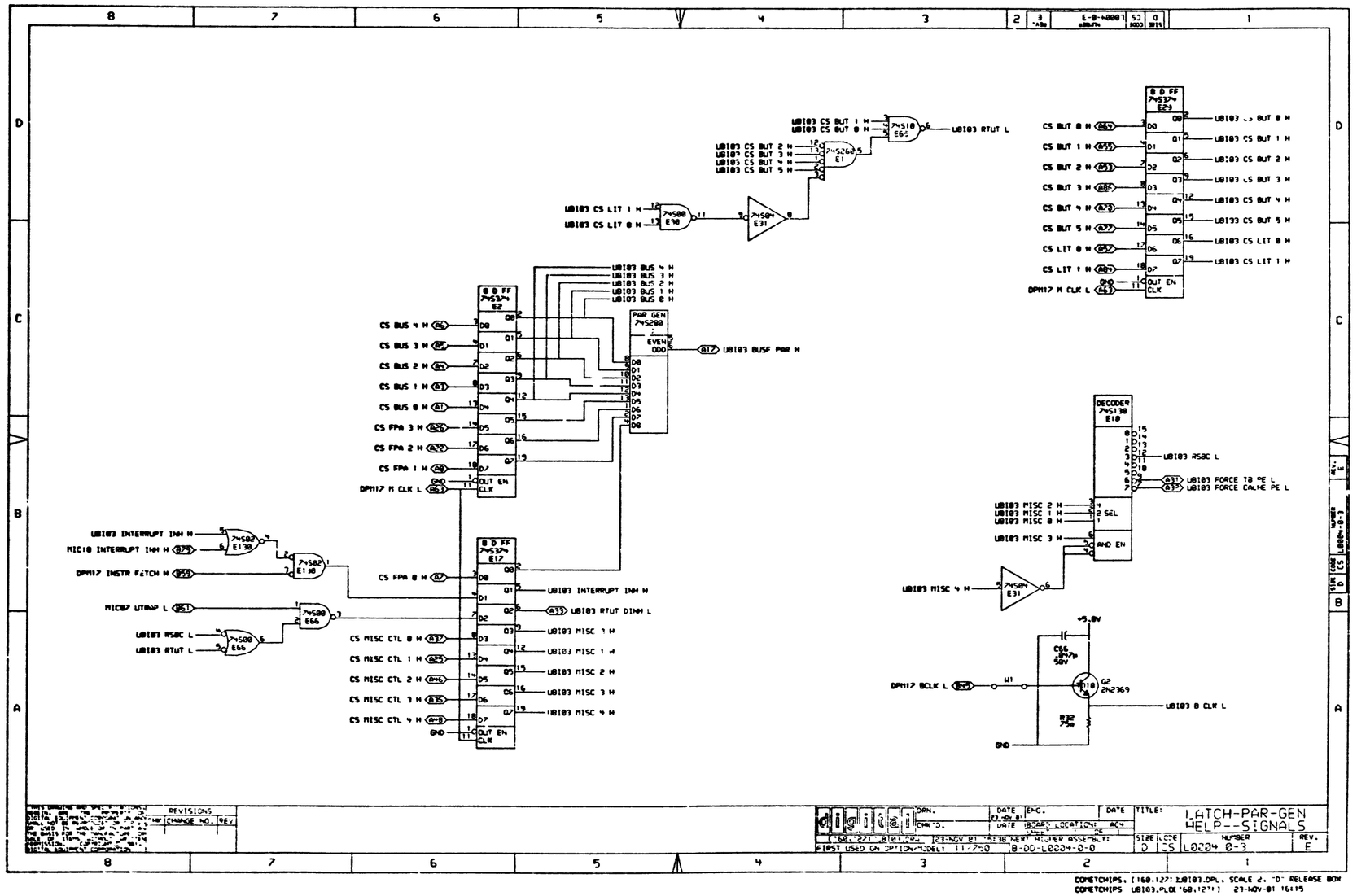
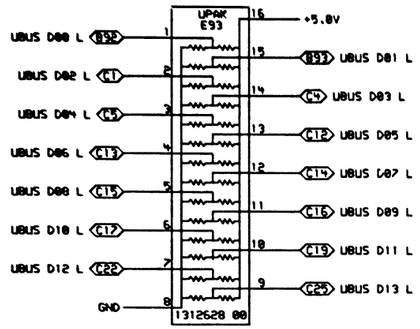
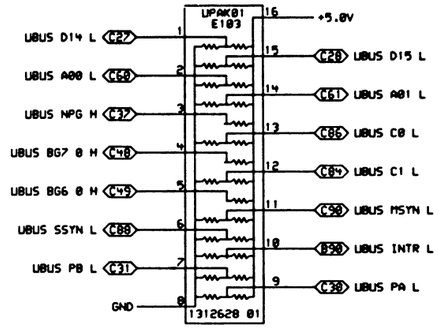
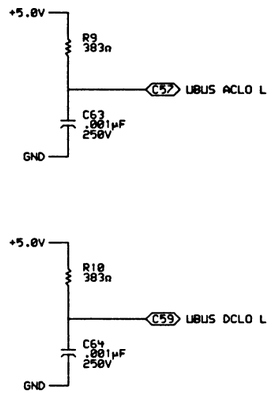
LA0102 TOY COUNTER 17 H
LA0102 TOY COUNTER 16 H
LA0102 TOY COUNTER 15 H
LA0102 TOY COUNTER 14 H
LA0102 TOY COUNTER 13 H
LA0102 TOY COUNTER 12 H
LA0102 TOY COUNTER 11 H
LA0102 TOY COUNTER 10 H
LA0102 TOY COUNTER 09 H
LA0102 TOY COUNTER 08 H
LA0102 TOY COUNTER 07 H
LA0102 TOY COUNTER 06 H
LA0102 TOY COUNTER 05 H
LA0102 TOY COUNTER 04 H
LA0102 TOY COUNTER 03 H
LA0102 TOY COUNTER 02 H
LA0102 TOY COUNTER 01 H
LA0102 TOY COUNTER 00 H
1Ke R30
1Ke R29
1Ke R8
TOY BATTERY
LA0101 RESET TOY COUNTER H
GND
MC14518
E26
2MH MUX 74LS253
E41
E42
E51
E28
LA0102 TOY COUNTER 31 H
LA0102 TOY COUNTER 23 H
LA0102 TOY COUNTER 15 H
LA0102 TOY COUNTER 07 H
LA0102 TOY COUNTER 30 H
LA0102 TOY COUNTER 22 H
LA0102 TOY COUNTER 14 H
LA0102 TOY COUNTER 06 H
LA0102 TOY COUNTER 29 H
LA0102 TOY COUNTER 21 H
LA0102 TOY COUNTER 13 H
LA0102 TOY COUNTER 05 H
LA0102 TOY COUNTER 28 H
LA0102 TOY COUNTER 20 H
LA0102 TOY COUNTER 12 H
LA0102 TOY COUNTER 04 H
LA0102 TOY COUNTER 27 H
LA0102 TOY COUNTER 19 H
LA0102 TOY COUNTER 11 H
LA0102 TOY COUNTER 03 H
LA0102 TOY COUNTER 26 H
LA0102 TOY COUNTER 18 H
LA0102 TOY COUNTER 10 H
LA0102 TOY COUNTER 02 H
LA0102 TOY COUNTER 25 H
LA0102 TOY COUNTER 17 H
LA0102 TOY COUNTER 09 H
LA0102 TOY COUNTER 01 H
LA0102 TOY COUNTER 24 H
LA0102 TOY COUNTER 16 H
LA0102 TOY COUNTER 08 H
LA0102 TOY COUNTER 00 H
LA0101 WBUS SET TOY L
LA0101 COUNTER SEL 1 H
LA0101 COUNTER SEL 0 H
C41 WBUS 23 H
C18 WBUS 22 H
C48 WBUS 21 H
C21 WBUS 20 H
C5 WBUS 19 H
C8 WBUS 18 H
C3 WBUS 17 H
C10 WBUS 16 H
REVISIONS
CHANGE NO.
DRN.
CHK'D.
ENG.
DATE
23-NOV-81
BOARD LOCATION:
TITLE:
TIME OF YEAR CLOCK
SIZE
D
CODE
CS
NUMBER
L2004-0-2
REV.
D
8-DD-L0004-0-0
NEXT HIGHER ASSEMBLY:
FIRST USED ON CATION-MODEL:
COMETCHIPS: [168,127]LA0102.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS LA0102.PLOT[168,127] 23-NOV-81 16:14

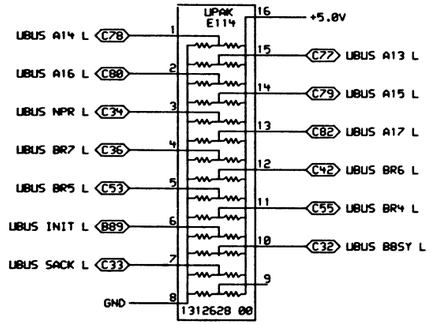


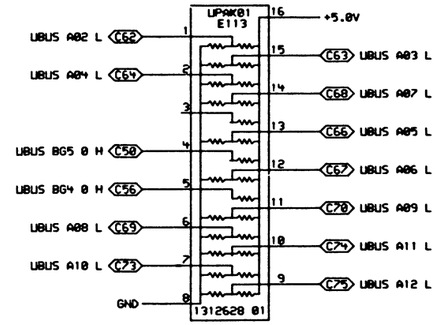
COMETCHIPS, [160,127]UB103.DPL, SCALE 2, "D" RELEASE BOM
COMETCHIPS UB103.PLO[160,127] 23-NOV-81 16:19











REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. R.CAFCAS | DATE 21-MAR-80 | ENG. | DATE

CHK'D. | DATE | BOARD LOCATION: AC4 | SHEET 1 OF

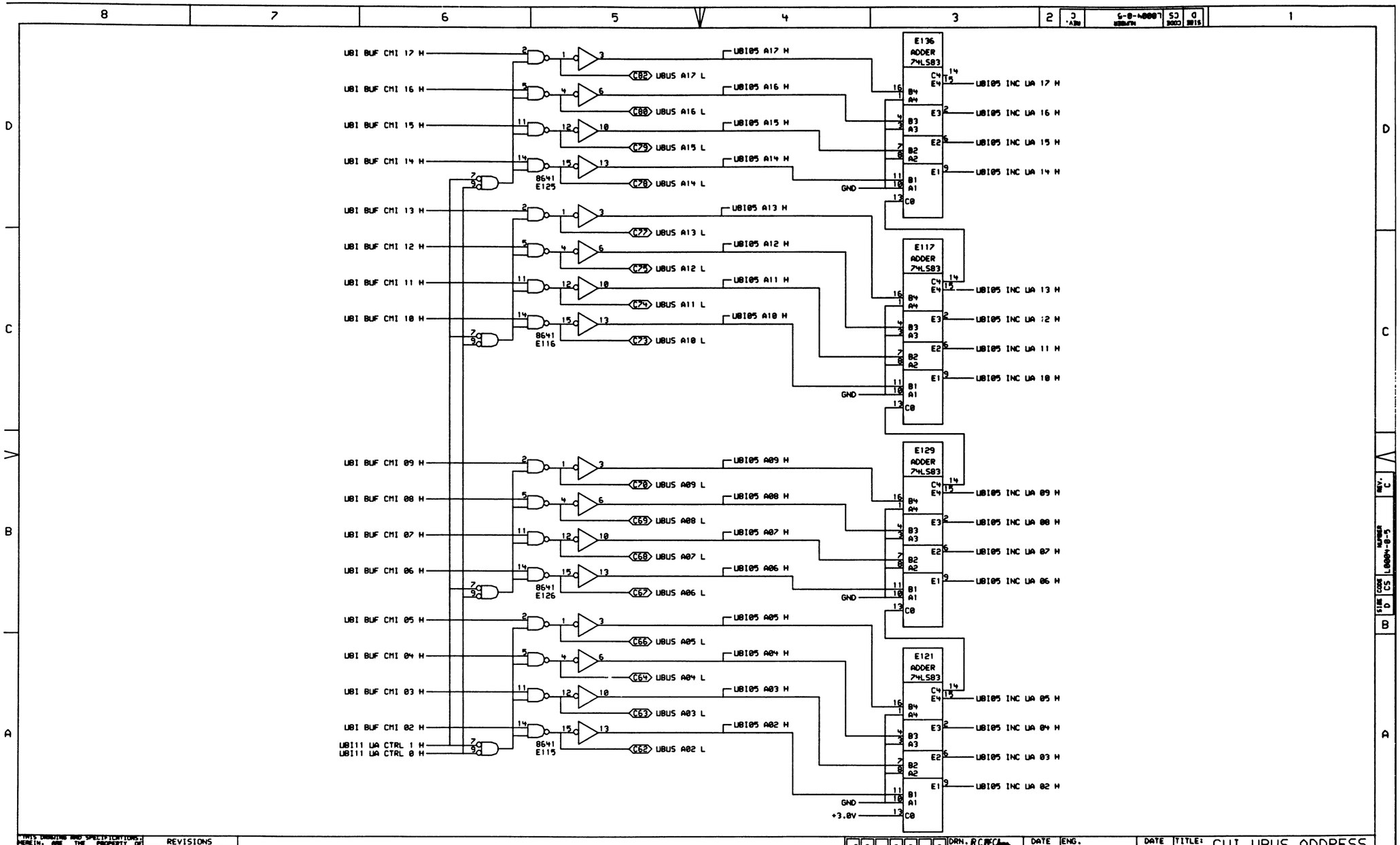
[160,127] UBI04.DRW 19-MAR-80 18:37 | NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0

FIRST USED ON OPTION/MODEL: 11/750

TITLE: UNIBUS RESISTOR PAKS

SIZE	CODE	NUMBER	REV.
D	CS	L0004-0-4	C

COMETCHIPS, [160,127] UBI04.DPL, SCALE 2, "D" RELEASE BOM
COMETCHIPS UBI04.PLO[160,127] 25-MAR-80 17:46



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REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. RCM/FC — DATE 25-MAR-80 — ENG. — DATE

CHK'D. — DATE — BOARD LOCATION: AC4 — SHEET 1 OF 1

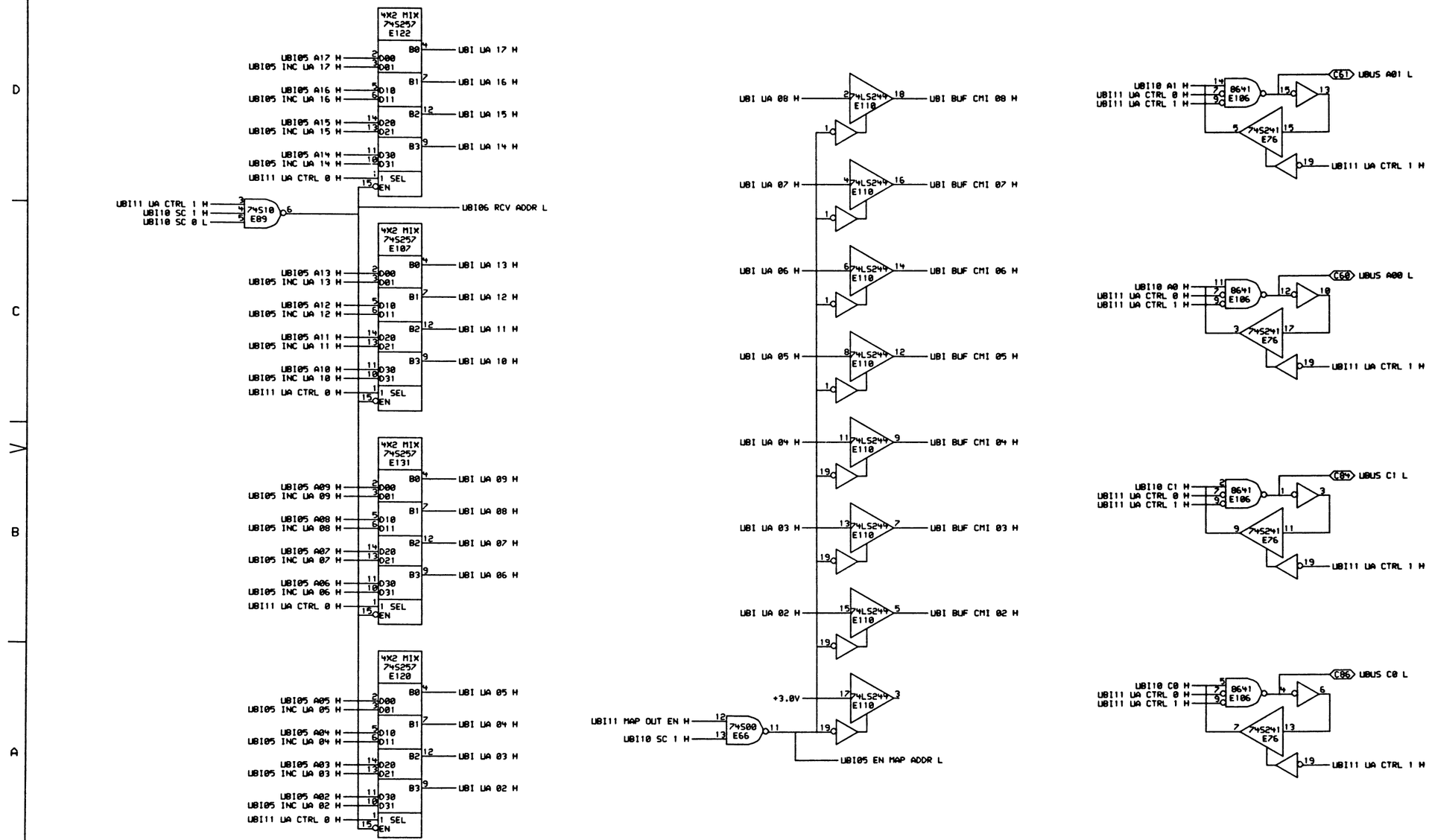
(160,127)UBI05.DRW 17-FEB-80 16:25 — NEXT HIGHER ASSEMBLY: B-DD-L0004-0-0

FIRST USED ON OPTION/MODEL: 11/750

TITLE: CUI UBUS ADDRESS SHT. 1 OF 2

SIZE	CODE	NUMBER	REV.
D	CS	L0004-0-5	C

COMETCHIPS, [160,127]UBI05.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UBI05.PLO[160,127] 25-MAR-80 17:47



REVISIONS		
CHK	CHANGE NO.	REV

digital

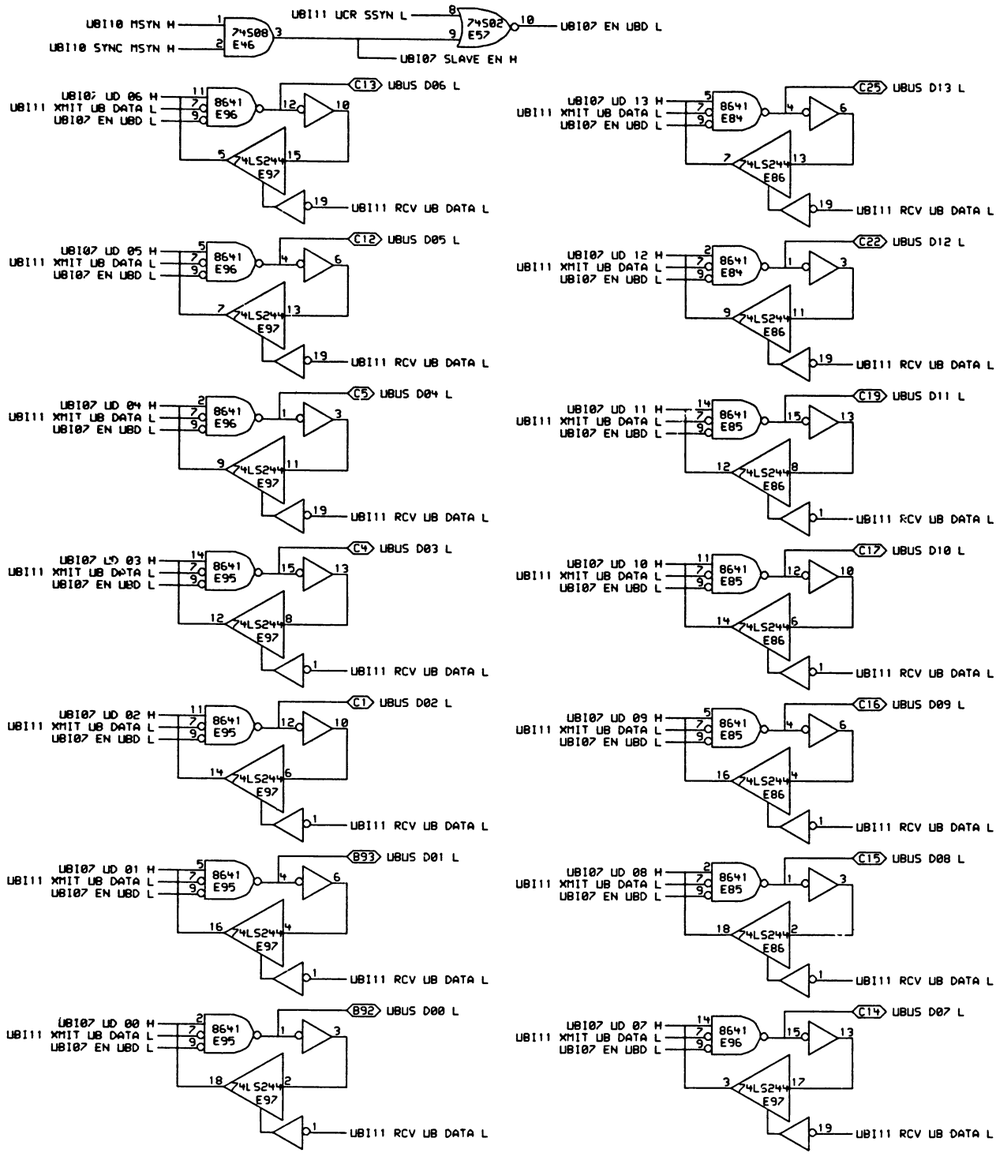
DRN. RCMFC | DATE 25-MAR-80 | ENG. | DATE

CHK'D. | DATE | BOARD LOCATION: AC4 | SHEET 1 OF 1

C160,1271 UBI06.DRW 17-FEB-00 16:27 | NEXT HIGHER ASSEMBLY: | SIZE D | CODE CS | NUMBER L0004-0-6 | REV. C

FIRST USED ON OPTION/MODEL: 11/750 | B-DD-L0003-0-0

TITLE: CUI UBUS ADDRESS SHT. 2 OF 2



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. RCAFC 04-APR-80 | ENG. | DATE
CHK D. | DATE | BOARD LOCATION: AC4

[160,127]UB107.DRW 04-APR-80 11:33 | NEXT HIGHER ASSEMBLY: B-DD-L0003-0-0
FIRST USED ON OPTION/MODEL: 11/750

SHEET 1 OF

TITLE: DATA PATH

SIZE	CODE	NUMBER	REV.
D	CS	L0004-0-7	C

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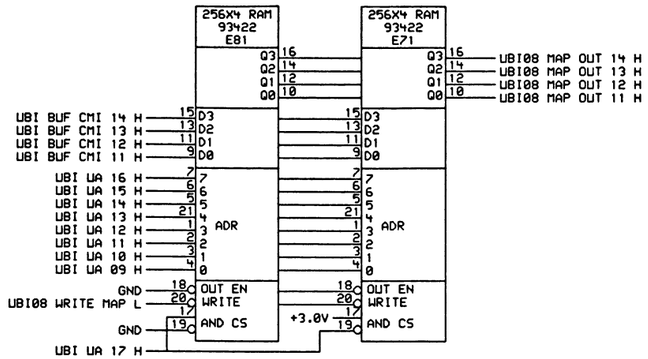
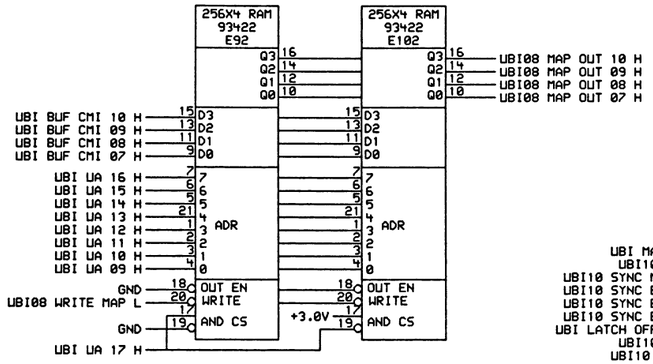
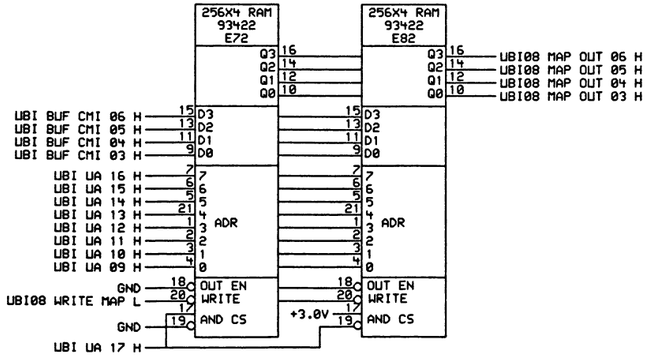
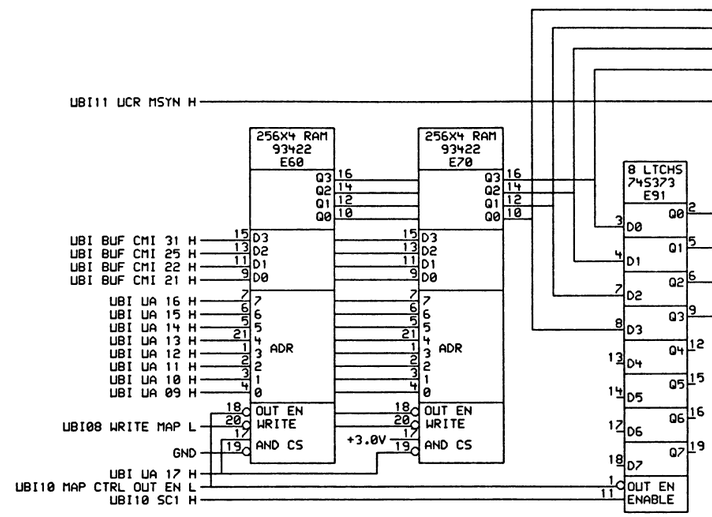
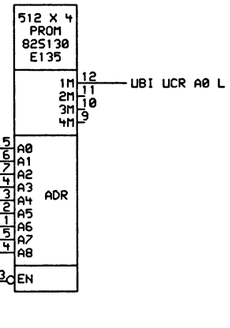
COMETCMIPS UB107.PLO[160,127] 04-APR-80 11:52

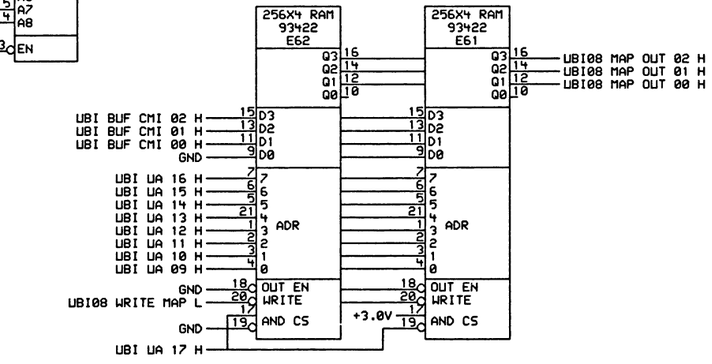


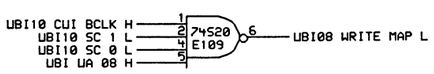


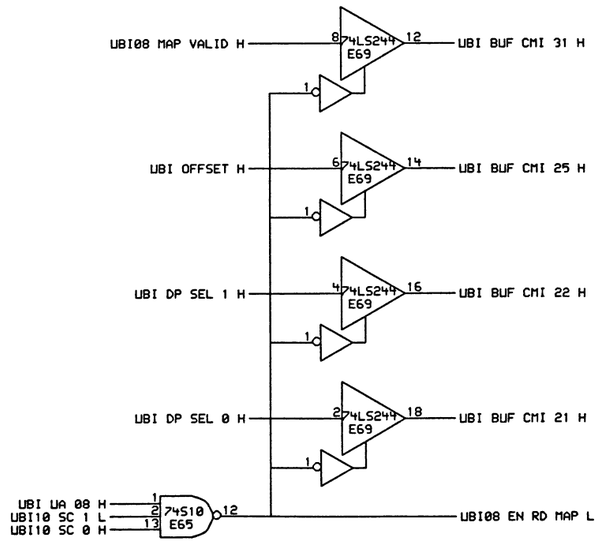










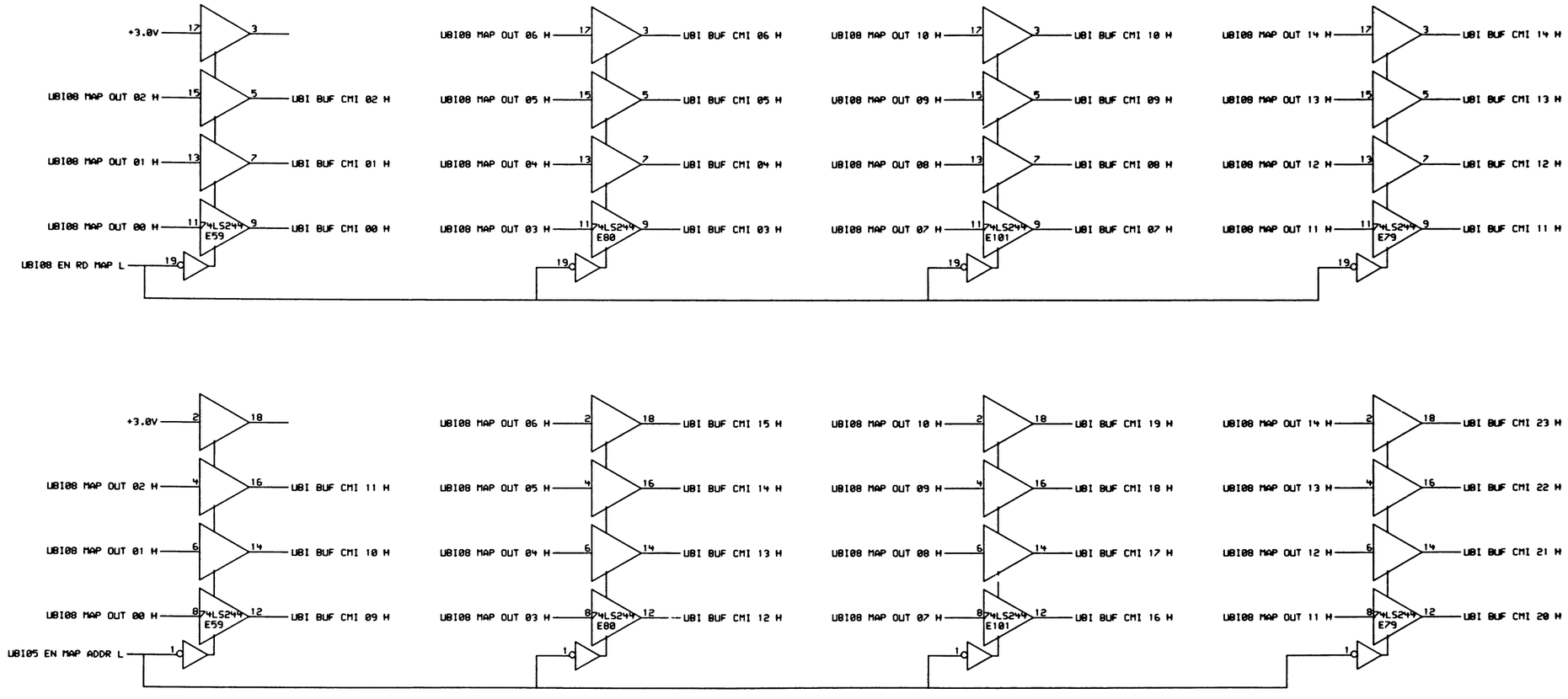


REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN.	DATE	ENG.	DATE	TITLE: CUI MAP
CHK'D.	24-APR-84 DATE	BOARD LOCATION: AC4 SHEET 1 OF 1		
DSKC:<DUVAL>UBI08.DRW 24-APR-84 14:08		NEXT HIGHER ASSEMBLY:		SIZE K / CODE CS / NUMBER L0004-0-8 / REV. D
FIRST USED ON OPTION/MODEL: 11/750		B-DD-L0004-0-0		

REV.	NUMBER	CODE	SIZE
D	L0004-0-8	CS	K



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. RCMFC | DATE 25-MAR-80 | ENG. | DATE

CHK'D. | DATE | BOARD LOCATION: AC4 | SHEET | OF

(150,127) UBI09.DRW 17-FEB-80 16:32 | NEXT HIGHER ASSEMBLY: B-DD-L0004-0-0

FIRST USED ON OPTION/MODEL: 11/750

TITLE: CUI MAP DECODE

SIZE	CODE	NUMBER	REV.
D	CS	L0004-0-9	C

UBI11 UCR SSYN H
GND
UBI10 INTR H
UBI07 SLAVE EN H
74S02 E47
8641 E83
C88 UBUS SSYN L
UBI10 SSYN H
B90 UBUS INTR L
UBI10 INTR H
C30 UBUS PA L
UBI10 PA H
C16 UBUS D09 L
UBI10 INTR H
UBI10 SYNC INTR H
74S08 E46
C90 UBUS MSYN L
UBI10 MSYN H
UBI08 MAP VALID L
8640 E104
8881 E94
UBI11 UCR MSYN H
UBI10 INTR H
UBI13 SACK DLYED H
UBI10 CUI BCLK L
UBI13 BG EN L
74S02 E57
74S132 E56
74S74 E44
74S03 E45
A93 CMI WAIT L
UBI10 C0 H
UBI10 C1 H
74S04 E31
74S00 E66
74S74 E67
UBI10 DATIP BBSY1 L
UBI11 UCR MSYN H
+3.0V
UBI11 STALL L
74S08 E46
74S08 E35
8 D FF 74S374 E36
UBI11 UCRV BUT 2 H
UBI11 UCRV BUT 1 H
UBI11 UCRV BUT 0 H
UBI10 SSYN H
UBI10 INTR H
UBI10 TIM CNT H
UBI12 SERIAL LINE INT L
UBI11 ROM CLK L
UBI10 SYNC MSYN H
UBI10 SYNC INTR H
UBI10 SYNC BUT2 H
UBI10 SYNC BUT1 H
UBI10 SYNC BUT0 H
UBI10 LATCH LINE INT L
DC619 UCN E48
BUT2
BUT1
BUT0
MSYN
SSYN
INT
TIMO
UBI10 C1 H
UBI10 C0 H
UBI10 A1 H
UBI10 A0 H
UBI10 PB H
UBI UA 08 H
UBI UA 11 H
UBI UA 10 H
UBI UA 09 H
CA11
CA4
CA3
CA2
ADDC
ADDU
HIGH
INIT
BCLK
URA3
URA2
URA1
URA0
BC31
BC30
BC29
BC28
BC27
BC26
BC25
BC0
DP1
DP0
OFF
SC1
SC0
DBBZ
ST1
ST0
MTCH
EARB
EMPC
UBI BUF CMI 31 H
UBI BUF CMI 30 H
UBI BUF CMI 29 H
UBI BUF CMI 28 H
UBI BUF CMI 27 H
UBI BUF CMI 26 H
UBI BUF CMI 25 H
UBI BUF CMI 00 H
UBI LATCH DP SEL 1 H
UBI LATCH DP SEL 0 H
UBI LATCH OFFSET H
B41 CMI STATUS 01 L
B40 CMI STATUS 00 L
UBI MATCH H
UBI10 ENABLE ARB REQ H
UBI10 MAP CTRL OUT EN L
UBI07 ADDC H
UBI07 ADDU H
UBI13 CPU BBSY L
UBI14 UB INIT H
UBI03 B CLK L
R34 75Ω
BINARY COUNTERS 74LS393 E6
UBI11 UCR MSYN L
UBI10 CUI BCLK H
CMI ARB 7 L
CMI ARB 6 L
CMI ARB 5 L
CMI HOLD L
74LS30 E43
UBI11 CMI ARB 4 H
+5.0V
E37 470Ω
UBI11 UCR NXT 3 H
UBI11 UCR NXT 2 H
UBI11 UCR NXT 1 H
UBI11 UCR NXT 0 H
74S05 E22
UBI10 UCR A3 L
UBI10 UCR A2 L
UBI10 UCR A1 L
UBI UCR A0 L
74S04 E87
UBI10 SC 0 L
UBI10 SC 1 L
UBI10 SC 1 H
UBI10 SC 0 H
B42 CMI DBBZ L
74S241 E76
UBI10 CUI DBBZ L
GND
UBI10 PB H
UBI07 SLAVE EN H
UBI11 UCR SSYN H
UBI10 PA H
UBI11 RCV UB DATA H
8881 E94
UBUS PB L
UBI10 CLOCKED DBBZ H
UBI10 CUI PREV DBBZ H
UBI10 CUI BCLK L
UBI10 CUI DBBZ L
UBI03 B CLK L
UBI10 CUI BCLK H

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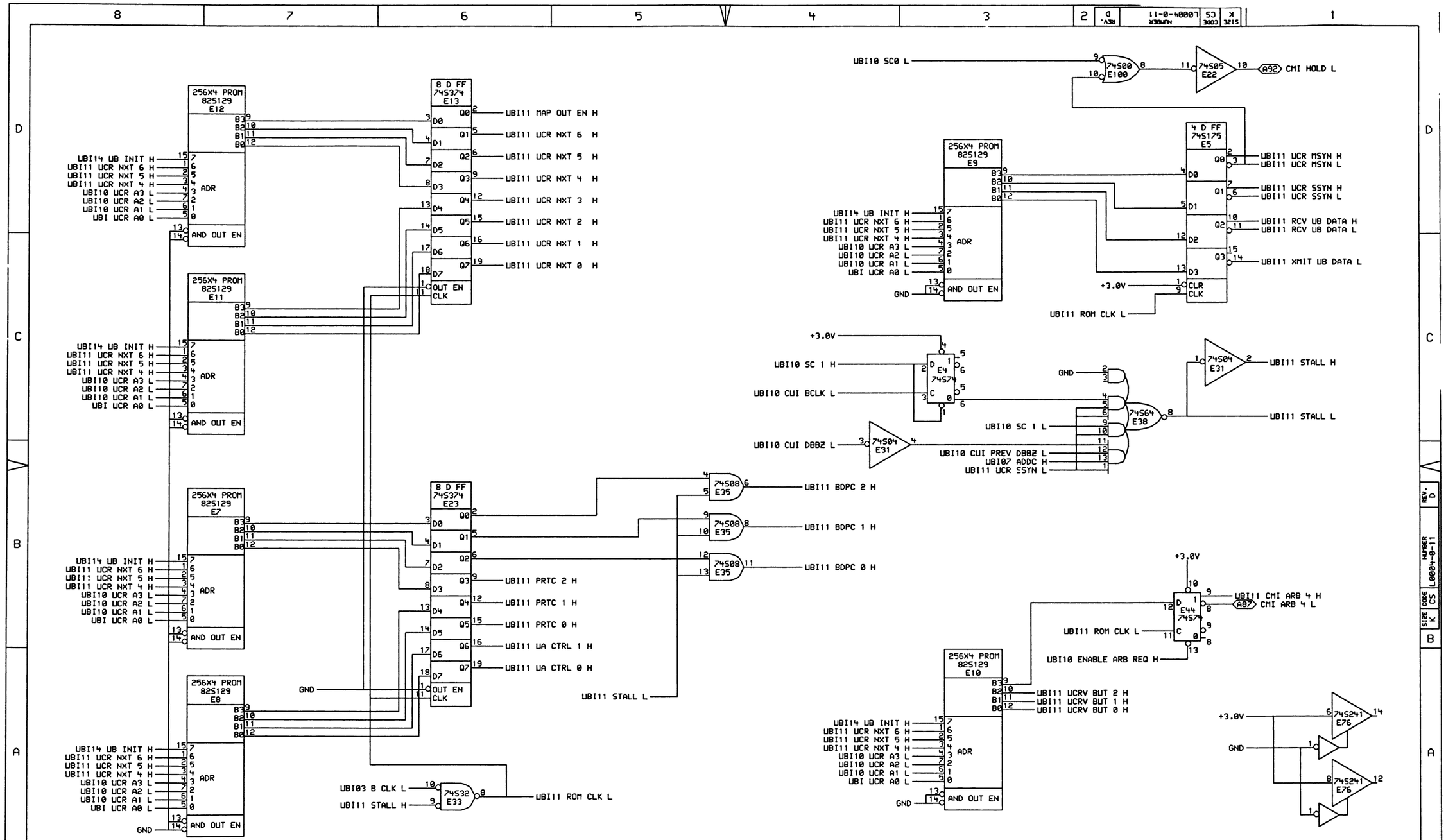
CHK	CHANGE NO.	REV

DRN.		DATE 10-APR-84	ENG. DATE
CHK "D.		DATE	BOARD LOCATION: A7 SHEET 1 OF

DSKC:<DUVAL>UBI10.DRW 09-APR-84 16:16 NEXT HIGHER ASSEMBLY
FIRST USED ON OPTION/MODEL: 11/750 B-DD-L0004-0-0

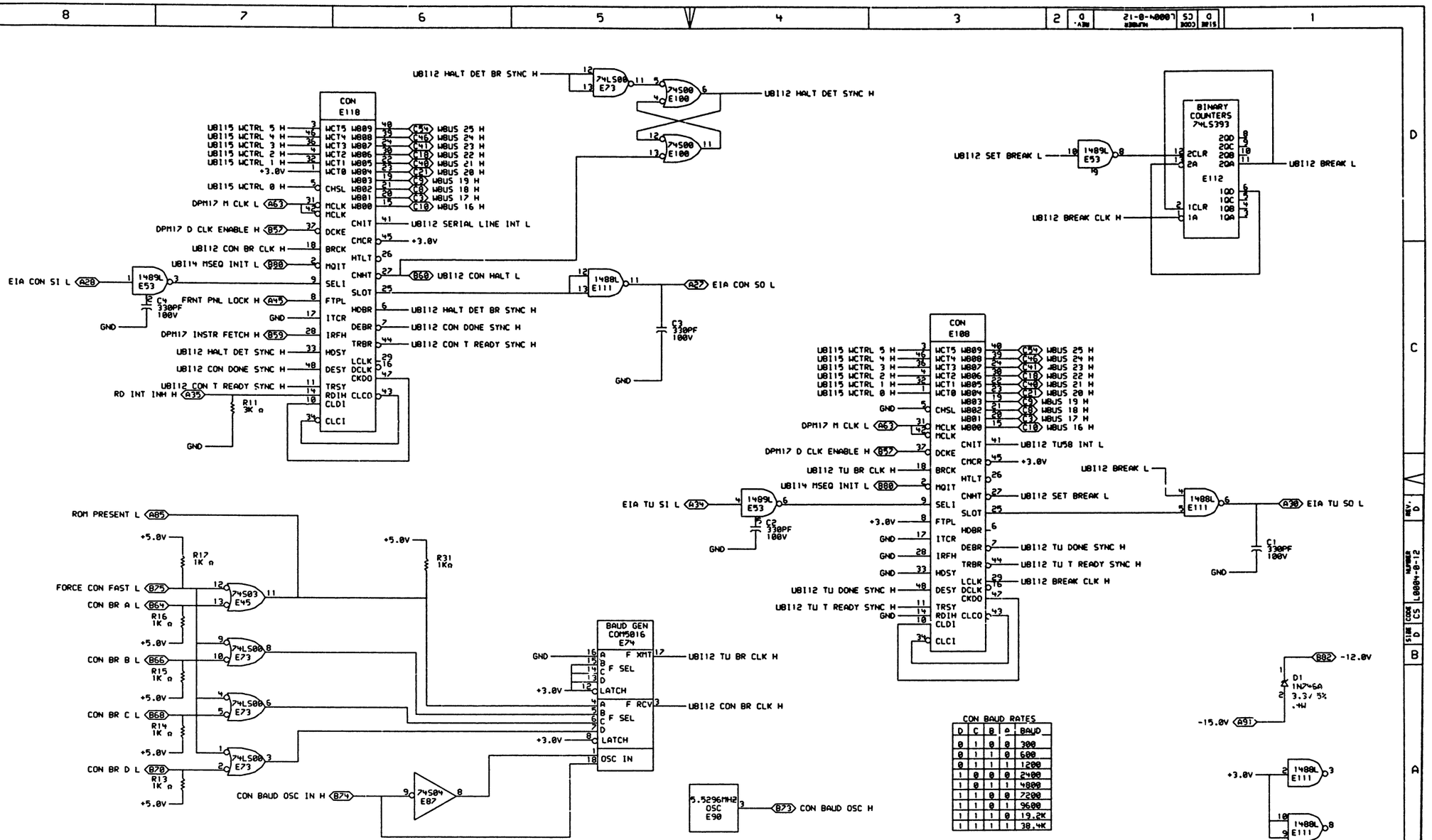
TITLE: CONTROL LOGIC

SIZE	CODE	NUMBER	REV.
K	CS	L0004-0-10	E



REVISIONS		
CHK	CHANGE NO.	REV

digital	DRN.	DATE	ENG.	DATE	TITLE: CUI CONTROL ROM
	CHK'D.	DATE 16-APR-84	BOARD LOCATION: AC4 SHEET 1 OF 1		
DSKC:<DUVAL>UBI11.DRW 09-APR-84 16:21		NEXT HIGHER ASSEMBLY:	SIZE K	CODE CS	NUMBER L0004-0-11 REV. D
FIRST USED ON OPTION/MODEL: 11/750		B-DD-L0004-0-0			



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REVISIONS		
CHK	CHANGE NO.	REV

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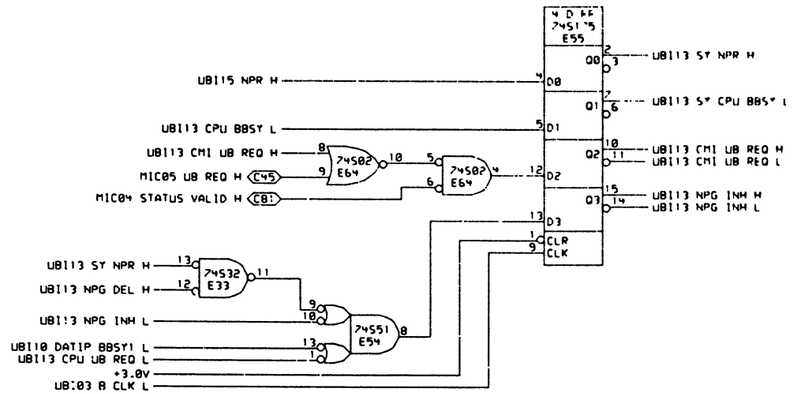
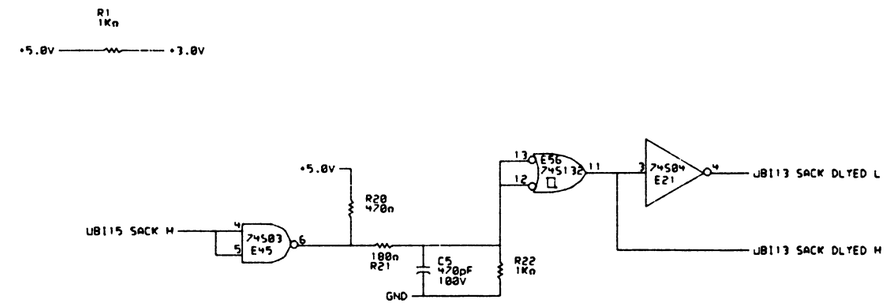
DRN. RCM/Cline	DATE 19-AUG-80	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: AC4 SHEET 1 OF 1	
[160,1271]UBII2.DRW 27-MAY-80 10:07		NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL: 11/750		B-DD-L0004-0-0	

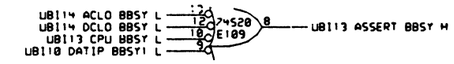
TITLE: CONSOLE INTERFACE

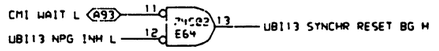
SIZE	CODE	NUMBER	REV.
D	CS	L0004-0-12	D

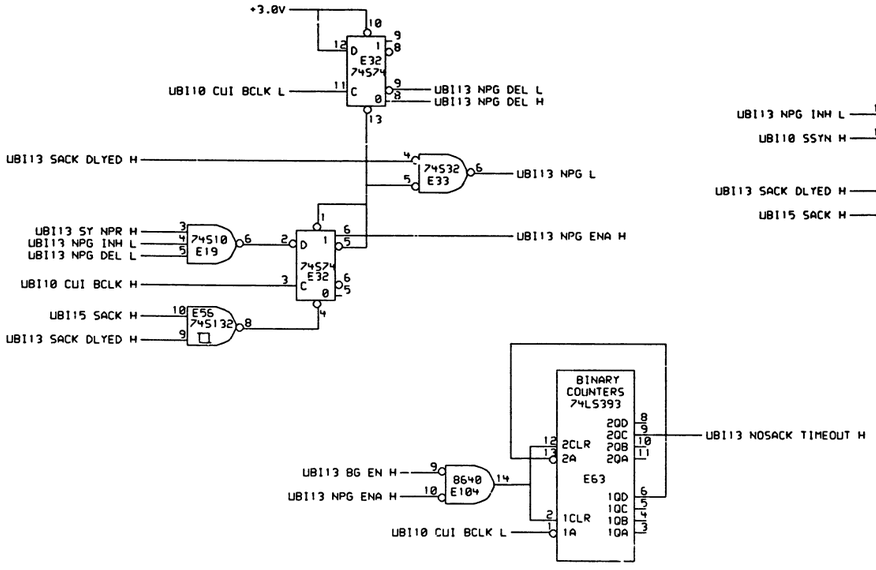
COMETCHIPS, [160,1271]UBII2.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UBII2.PLOC[160,1271] 19-AUG-80 14:25

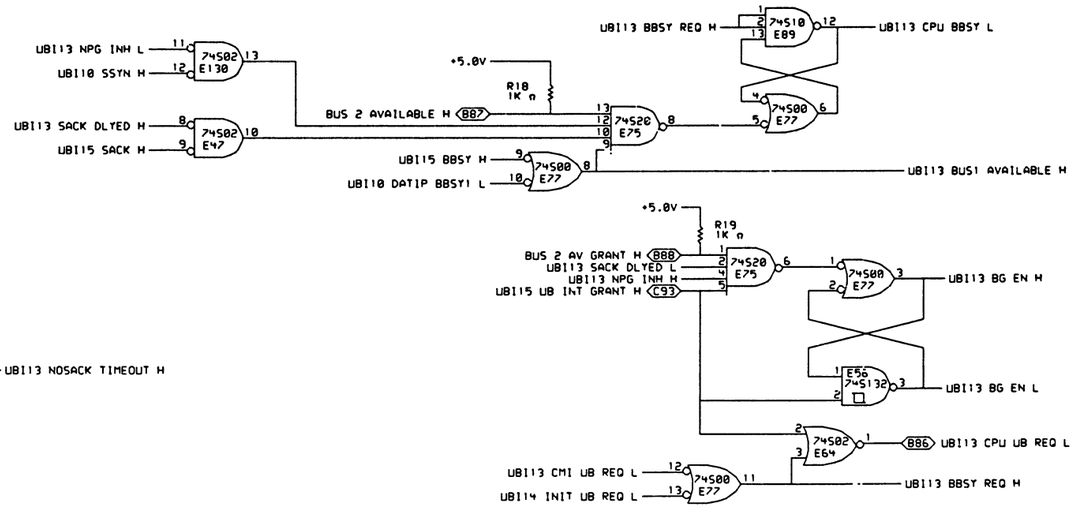












REVISIONS		
C	4K	
CHANGE NO.		REV

digital

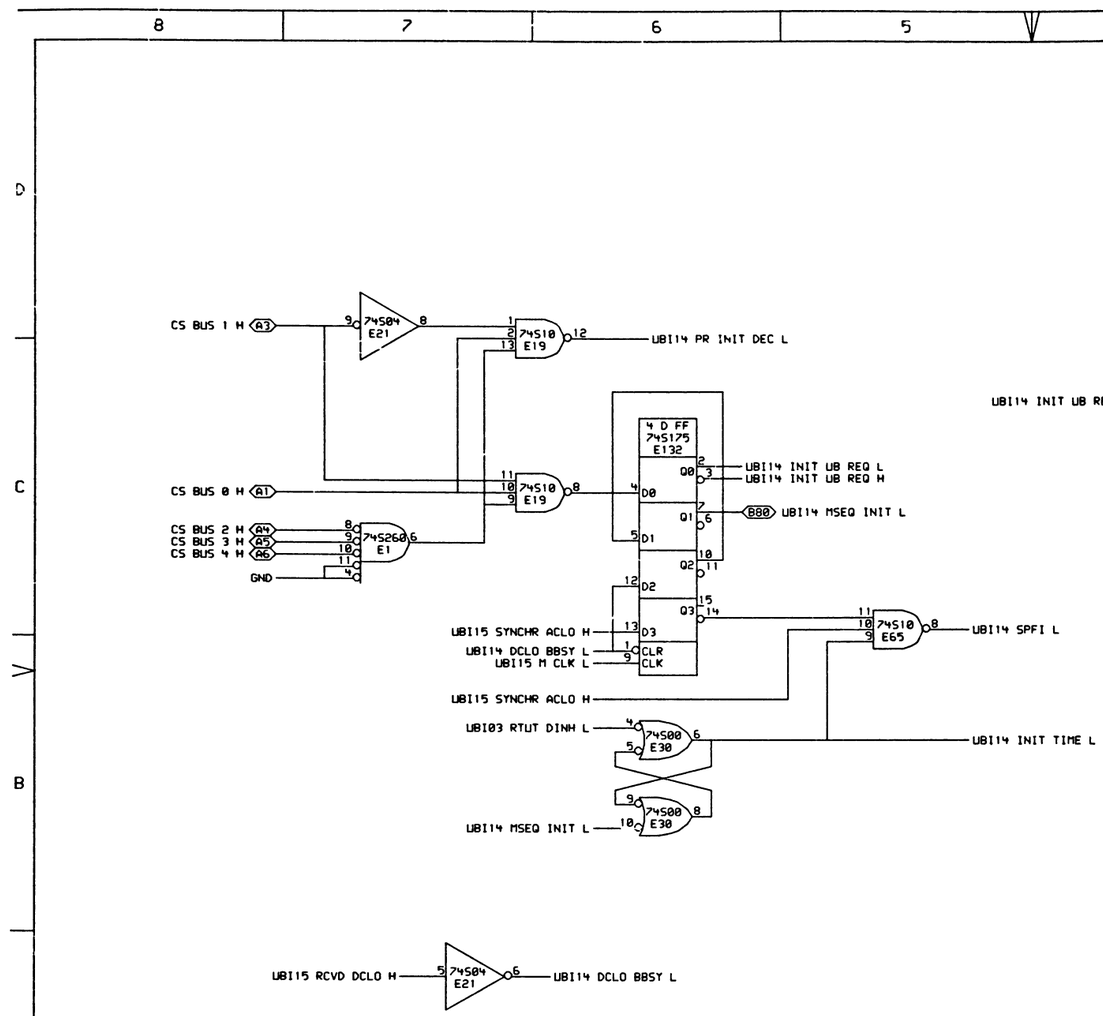
DRN. RCM/CLane — DATE 26-MAR-81 — ENG. — DATE
CHK'D. — DATE — BOARD LOCATION: AC4 — SHEET 1 OF 1

[160,1271]UBI13.DRW — 06-NOV-80 19:29 — NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL: 11/750 — B-DD-L0004-0-0

TITLE: UBUS CONTROL

SIZE	CODE	NUMBER	REV.
D	CS	L0004-0-13	D

COMETCHIPS, [160,1271]UBI13.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UBI13.PLO[160,1271] 26-MAR-81 11:25



REVISIONS		
CHK	CHANGE NO.	REV

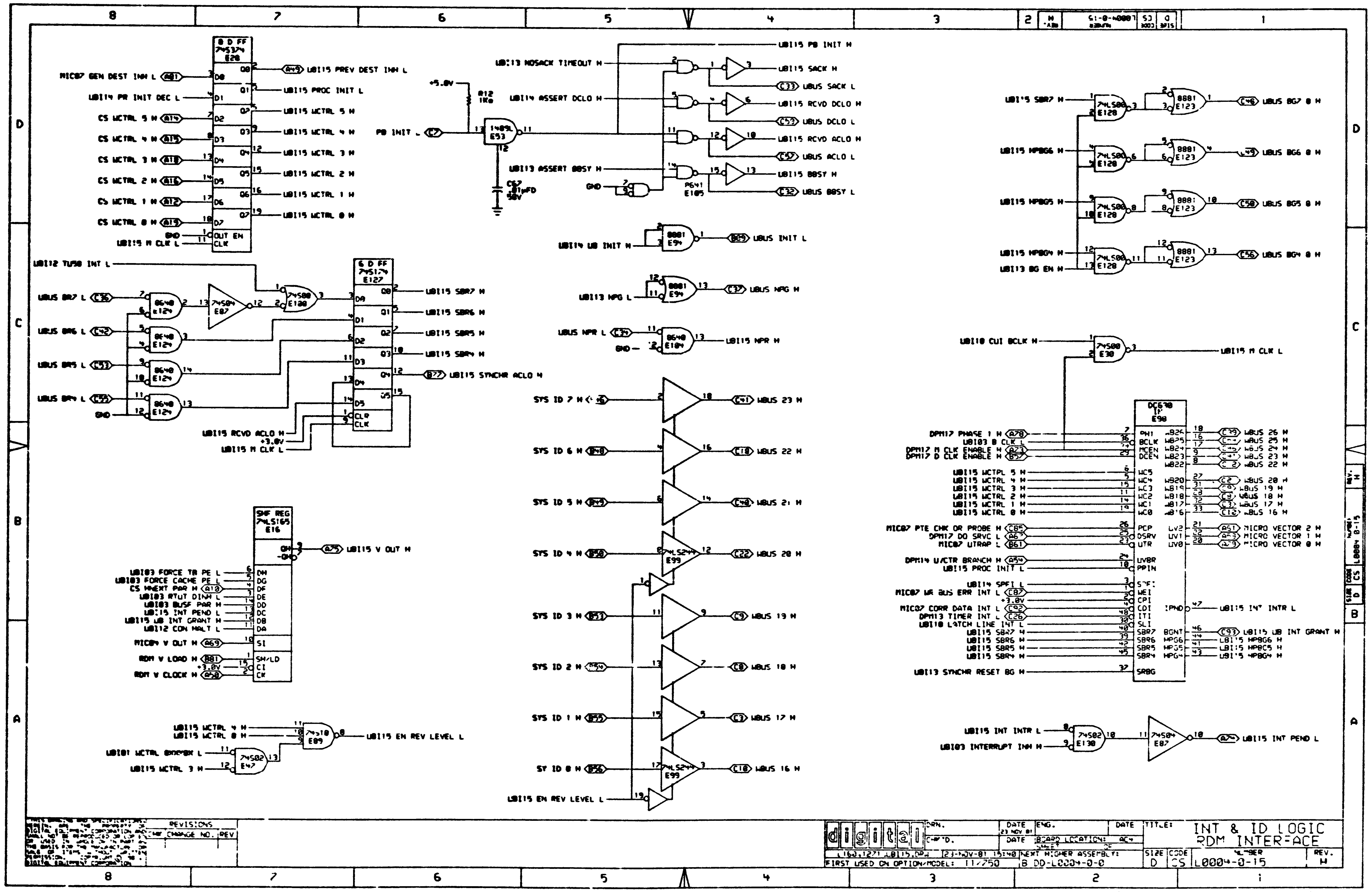
digital

DRN. R.C.McClure — DATE 24-APR-80 — ENG. — DATE
CHK'D. — DATE — BOARD LOCATION: AC4 — SHEET 1 OF 1
[160,1271]UBI14.DRW 03-APR-80 18:14 — NEXT HIGHER ASSEMBLY: B-DD-L0004-0-0
FIRST USED ON OPTION/MODEL: 11/750

TITLE: AC-DC LO MSEQ INIT

SIZE	CODE	NUMBER	REV.
D	CS	L0004-0-14	C

COMETCHIPS, [160,1271]UBI14.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UBI14.PLO[160,1271] 24-APR-80 09:17



COMETCHIPS. [160,1271]UBI15.UPL. SCALE 2. D" RELEASE BOX
COMETCHIPS UBI15.PLO[160,1271] 23-NOV-81 16:15

SIGNAL NAME	PAGE NUMBER(S)
BUS 2 AV GRANT H	13
BUS 2 AVAILABLE H	13
CMI ARB 4 L	11
CMI ARB 5 L	10
CMI ARB 6 L	10
CMI ARB 7 L	10
CMI DATA 00 H	07
CMI DATA 01 H	07
CMI DATA 02 H	07
CMI DATA 03 H	07
CMI DATA 04 H	07
CMI DATA 05 H	07
CMI DATA 06 H	07
CMI DATA 07 H	07
CMI DATA 08 H	07
CMI DATA 09 H	07
CMI DATA 10 H	07
CMI DATA 11 H	07
CMI DATA 12 H	07
CMI DATA 13 H	07
CMI DATA 14 H	07
CMI DATA 15 H	07
CMI DATA 16 H	07
CMI DATA 17 H	07
CMI DATA 18 H	07
CMI DATA 19 H	07
CMI DATA 20 H	07
CMI DATA 21 H	07
CMI DATA 22 H	07
CMI DATA 23 H	07
CMI DATA 24 H	07
CMI DATA 25 H	07
CMI DATA 26 H	07
CMI DATA 27 H	07
CMI DATA 28 H	07
CMI DATA 29 H	07
CMI DATA 30 H	07
CMI DATA 31 H	07
CMI DBB2 L	10
CMI HOLD L	11,10
CMI STATUS 00 L	10
CMI STATUS 01 L	10
CMI WAIT L	10,13
CON BAUD OSC H	12
CON BAUD OSC IN H	12
CON BR A L	12
CON BR B L	12
CON BR C L	12
CON BR D L	12
CS ADDR 02 H	3

SIGNAL NAME	PAGE NUMBER(S)
CS ADDR 12 H	3
CS BUS 0 H	03,14
CS BUS 1 H	03,14
CS BUS 2 H	14,03
CS BUS 3 H	14,03
CS BUS 4 H	14,03
CS BUF 0 H	03
CS BUF 1 H	03
CS BUF 2 H	03
CS BUF 3 H	03
CS BUF 4 H	03
CS BUF 5 H	03
CS FPA 0 H	03
CS FPA 1 H	03
CS FPA 2 H	03
CS FPA 3 H	03
CS HNEXT PAR H	15
CS LIT 0 H	03
CS LIT 1 H	03
CS MISC CTL 0 H	03
CS MISC CTL 1 H	03
CS MISC CTL 2 H	03
CS MISC CTL 3 H	03
CS MISC CTL 4 H	03
CS PAR 1 H	3
CS WCTRL 0 H	15
CS WCTRL 1 H	15
CS WCTRL 2 H	15
CS WCTRL 3 H	15
CS WCTRL 4 H	15
CS WCTRL 5 H	15
DPM13 TIMER INT L	15
DPM14 UVCTR BRANCH H	15
DPM17 BCLK L	03
DPM17 D CLK ENABLE H	15,12
DPM17 DO SRVC L	15
DPM17 INSTR FETCH H	12,13
DPM17 M CLK ENABLE H	15
DPM17 M CLK L	03,01,12
DPM17 PHASE 1 H	15
EIA CON SI L	12
EIA CON SO L	12
EIA TU SI L	12
EIA TU SO L	12
FORCE CON FAST L	12
FRNT PNL LOCK H	12
MIC04 STATUS VALID H	13
MIC04 V OUT H	15
MIC05 UB REQ H	13
MIC07 CORR DATA INT L	15

SIGNAL NAME	PAGE NUMBER(S)
MIC07 PTE CHK OR PROBE H	15
MIC07 UTRAP L	03,15
MIC07 WR BUS ERR INT L	15
MIC18 INTERRUPT INH H	03
MICRO VECTOR 0 H	15
MICRO VECTOR 1 H	15
MICRO VECTOR 2 H	15
PB INIT L	15
RD INT INH H	12
ROM V CLOCK H	15
ROM V LOAD H	15
ROM PRESENT L	12
ST ID 0 H	15
SYS ID 1 H	15
SYS ID 2 H	15
SYS ID 3 H	15
SYS ID 4 H	15
SYS ID 5 H	15
SYS ID 6 H	15
SYS ID 7 H	15
TOY BATTERY	01
UBI BUF CMI 00 H	10,07,09,08
UBI BUF CMI 01 H	07,09,08
UBI BUF CMI 02 H	09,08,07,06,05
UBI BUF CMI 03 H	07,08,09,06,05
UBI BUF CMI 04 H	08,09,07,06,05
UBI BUF CMI 05 H	08,09,07,06,05
UBI BUF CMI 06 H	08,07,09,06,05
UBI BUF CMI 07 H	07,08,09,06,05
UBI BUF CMI 08 H	07,08,09,06,05
UBI BUF CMI 09 H	07,09,08,05
UBI BUF CMI 10 H	09,07,08,05
UBI BUF CMI 11 H	09,07,08,05
UBI BUF CMI 12 H	08,09,07,05
UBI BUF CMI 13 H	08,09,07,05
UBI BUF CMI 14 H	08,07,09,05
UBI BUF CMI 15 H	07,09,05
UBI BUF CMI 16 H	07,09,05
UBI BUF CMI 17 H	07,09,05
UBI BUF CMI 18 H	07,09
UBI BUF CMI 19 H	07,09
UBI BUF CMI 20 H	09,07
UBI BUF CMI 21 H	08,09,07
UBI BUF CMI 22 H	08,07,09
UBI BUF CMI 23 H	07,09
UBI BUF CMI 24 H	1
UBI BUF CMI 25 H	10,07,08
UBI BUF CMI 26 H	10,07
UBI BUF CMI 27 H	10,07
UBI BUF CMI 28 H	10,07
UBI BUF CMI 29 H	10,07

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REVISIONS		
CHK	CHANGE NO.	REV.

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DRN. DJ Gross — DATE 26-MAR-81 — ENG. — DATE
CHK'D. — DATE — BOARD LOCATION: AC4 — SHEET 1 OF 1
[160,1271]UBI16.DRW 06-NOV-80 19:24:1 — NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL: 11/750 — B-DD-L0004-0-0

TITLE: UBI FORWARD REFERENCE

SIZE	CODE	NUMBER	REV.
D	CS	L0004-0-16	D

COMETCHIPS, [160,1271]UBI16.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UBI16.PLO[160,1271] 26-MAR-81 11:26

SIGNAL NAME	PAGE NUMBER(S)
UBI BUF CMI 30 H	10,07
UBI BUF CMI 31 H	10,08,07
UBI DP SEL 0 H	08
UBI DP SEL 1 H	08
UBI LATCH DP SEL 0 H	10,07,08
UBI LATCH DP SEL 1 H	10,07,08
UBI LATCH OFFSET H	10,07,08
UBI MATCH H	10,07,08
UBI OFFSET H	08
UBI UA 02 H	07,06
UBI UA 03 H	07,06
UBI UA 04 H	07,06
UBI UA 05 H	07,06
UBI UA 06 H	07,06
UBI UA 07 H	07,06
UBI UA 08 H	10,08,07,06
UBI UA 09 H	10,08,07,06
UBI UA 10 H	10,08,07,06
UBI UA 11 H	10,08,07,06
UBI UA 12 H	08,07,06
UBI UA 13 H	08,07,06
UBI UA 14 H	08,07,06
UBI UA 15 H	07,08,06
UBI UA 16 H	07,08,06
UBI UA 17 H	08,07,06
UBI01 BATT DC LO L	01
UBI01 COUNTER SEL 0 H	02,01
UBI01 COUNTER SEL 1 H	02,01
UBI01 CPU DC LO H	01
UBI01 RESET TOY COUNTER H	02,01
UBI01 WBUS GET TOY L	02,01
UBI01 WCTRL 0XXX0X L	01,15
UBI02 TOY COUNTER 00 H	02
UBI02 TOY COUNTER 01 H	02
UBI02 TOY COUNTER 02 H	02
UBI02 TOY COUNTER 03 H	02
UBI02 TOY COUNTER 04 H	02
UBI02 TOY COUNTER 05 H	02
UBI02 TOY COUNTER 06 H	02
UBI02 TOY COUNTER 07 H	02
UBI02 TOY COUNTER 08 H	02
UBI02 TOY COUNTER 09 H	02
UBI02 TOY COUNTER 10 H	02
UBI02 TOY COUNTER 11 H	02
UBI02 TOY COUNTER 12 H	02
UBI02 TOY COUNTER 13 H	02
UBI02 TOY COUNTER 14 H	02
UBI02 TOY COUNTER 15 H	02
UBI02 TOY COUNTER 16 H	02
UBI02 TOY COUNTER 17 H	02

SIGNAL NAME	PAGE NUMBER(S)
UBI02 TOY COUNTER 18 H	02
UBI02 TOY COUNTER 19 H	02
UBI02 TOY COUNTER 20 H	02
UBI02 TOY COUNTER 21 H	02
UBI02 TOY COUNTER 22 H	02
UBI02 TOY COUNTER 23 H	02
UBI02 TOY COUNTER 24 H	02
UBI02 TOY COUNTER 25 H	02
UBI02 TOY COUNTER 26 H	02
UBI02 TOY COUNTER 27 H	02
UBI02 TOY COUNTER 28 H	02
UBI02 TOY COUNTER 29 H	02
UBI02 TOY COUNTER 30 H	02
UBI02 TOY COUNTER 31 H	02
UBI03 B CLK L	11,10,13,07,15,03
UBI03 BUS 0 H	03
UBI03 BUS 1 H	03
UBI03 BUS 2 H	03
UBI03 BUS 3 H	03
UBI03 BUS 4 H	03
UBI03 BUSF PAR H	03,15
UBI03 CS BUT 0 H	03
UBI03 CS BUT 1 H	03
UBI03 CS BUT 2 H	03
UBI03 CS BUT 3 H	03
UBI03 CS BUT 4 H	03
UBI03 CS BUT 5 H	03
UBI03 CS LIT 0 H	03
UBI03 CS LIT 1 H	03
UBI03 FORCE CACHE PE L	15,03
UBI03 FORCE TB PE L	15,03
UBI03 INTERRUPT INH H	03,15
UBI03 MISC 0 H	03
UBI03 MISC 1 H	03
UBI03 MISC 2 H	03
UBI03 MISC 3 H	03
UBI03 MISC 4 H	03
UBI03 RSBC L	03
UBI03 RTUT DINH L	15,03,14
UBI03 RTUT L	03
UBI05 A02 H	05,06
UBI05 A03 H	05,06
UBI05 A04 H	05,06
UBI05 A05 H	05,06
UBI05 A06 H	05,06
UBI05 A07 H	05,06
UBI05 A08 H	05,06
UBI05 A09 H	05,06
UBI05 A10 H	06,05
UBI05 A11 H	06,05
UBI05 A12 H	06,05

SIGNAL NAME	PAGE NUMBER(S)
UBI05 A13 H	06,05
UBI05 A14 H	06,05
UBI05 A15 H	06,05
UBI05 A16 H	06,05
UBI05 A17 H	06,05
UBI05 EN MAP ADDR L	09,06
UBI05 INC UA 02 H	06,05
UBI05 INC UA 03 H	06,05
UBI05 INC UA 04 H	06,05
UBI05 INC UA 05 H	06,05
UBI05 INC UA 06 H	05,06
UBI05 INC UA 07 H	05,06
UBI05 INC UA 08 H	05,06
UBI05 INC UA 09 H	05,06
UBI05 INC UA 10 H	06,05
UBI05 INC UA 11 H	06,05
UBI05 INC UA 12 H	06,05
UBI05 INC UA 13 H	06,05
UBI05 INC UA 14 H	06,05
UBI05 INC UA 15 H	06,05
UBI05 INC UA 16 H	06,05
UBI05 INC UA 17 H	06,05
UBI06 RCV ADDR L	06
UBI07 ADDC H	10,11,07
UBI07 ADDU H	10,07
UBI07 EN UBD L	07
UBI07 SLAVE EN H	07,10
UBI07 UD 00 H	07
UBI07 UD 01 H	07
UBI07 UD 02 H	07
UBI07 UD 03 H	07
UBI07 UD 04 H	07
UBI07 UD 05 H	07
UBI07 UD 06 H	07
UBI07 UD 07 H	07
UBI07 UD 08 H	07
UBI07 UD 09 H	07
UBI07 UD 10 H	07
UBI07 UD 11 H	07
UBI07 UD 12 H	07
UBI07 UD 13 H	07
UBI07 UD 14 H	07
UBI07 UD 15 H	07
UBI08 EN RD MAP L	09,08
UBI08 MAP OUT 00 H	09,08
UBI08 MAP OUT 01 H	09,08
UBI08 MAP OUT 02 H	09,08
UBI08 MAP OUT 03 H	08,09
UBI08 MAP OUT 04 H	08,09
UBI08 MAP OUT 05 H	08,09

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REVISIONS | CHK | CHANGE NO. | REV

digital — DRN. 10-APR-84 — CHK'D. — ENG. — BOARD LOCATION: AC4 — SHEET 1 OF 1

DSKC:<DUVAL>UBI17.DRW 09-APR-84 16:24 — NEXT HIGHER ASSEMBLY: B-DD-L0004-0-0

FIRST USED ON OPTION/MODEL: 11/750

TITLE: UBI FORWARD REFERENCE

SIZE K — CODE CS — NUMBER L0004-0-17 — REV. E

SIGNAL NAME	PAGE NUMBER(S)
UBI08 MAP OUT 06 H	08,09
UBI08 MAP OUT 07 H	08,09
UBI08 MAP OUT 08 H	08,09
UBI08 MAP OUT 09 H	08,09
UBI08 MAP OUT 10 H	08,09
UBI08 MAP OUT 11 H	08,09
UBI08 MAP OUT 12 H	08,09
UBI08 MAP OUT 13 H	08,09
UBI08 MAP OUT 14 H	08,09
UBI08 MAP VALID H	08
UBI08 MAP VALID L	08,10
UBI08 WRITE MAP L	08
UBI10 A0 H	10,07,06
UBI10 A1 H	10,07,06,08
UBI10 C0 H	10,06
UBI10 C1 H	10,06,08
UBI10 CLOCKED DBBZ H	10
UBI10 CUI BCLK H	10,15,13,08
UBI10 CUI BCLK L	11,10,13
UBI10 CUI DBBZ L	11,07,10
UBI10 SYNC BUT0 H	08,10
UBI10 CUI PREV DBBZ H	10,07
UBI10 CUI PREV DBBZ L	10,11
UBI10 DATIP BBSY1 L	13,10
UBI10 ENABLE ARB REQ H	11,10
UBI10 INTR H	10
UBI10 LATCH LINE INT L	10,15
UBI10 MAP CTRL OUT EN L	10,08
UBI10 MSYN H	10,07
UBI10 PA H	10
UBI10 PB H	10
UBI10 SC 0 H	10,07,08
UBI10 SC 0 L	10,06,08
UBI10 SC 1 H	11,10,07,06,08
UBI10 SC 1 L	11,08,10
UBI10 SC0 L	1
UBI10 SSYN H	10,13
UBI10 SYNC INTR H	10
UBI10 SYNC MSYN H	10,07,08
UBI10 TIM CNT H	10
UBI UCR A0 L	11,10,08
UBI10 UCR A1 L	11,10
UBI10 SYNC BUT1 H	08,10
UBI10 SYNC BUT2 H	08,10
UBI10 UCR A2 L	11,10
UBI10 UCR A3 L	11,10
UBI11 BDPC 0 H	11,07
UBI11 BDPC 1 H	11,07
UBI11 BDPC 2 H	11,07
UBI11 CMI ARB 4 H	10,11
UBI11 MAP OUT EN H	11,06
UBI11 PRTC 0 H	11,07
UBI11 PRTC 1 H	11,07
UBI11 PRTC 2 H	11,07

SIGNAL NAME	PAGE NUMBER(S)
UBI11 RCV UB DATA H	11,10
UBI11 RCV UB DATA L	11,07
UBI11 ROM CLK L	11,10
UBI11 STALL H	11
UBI11 STALL L	11,10
UBI11 UA CTRL 0 H	11,06,05
UBI11 UA CTRL 1 H	11,06,05
UBI11 UCR MSYN H	11,08,10
UBI11 UCR MSYN L	11,10
UBI11 UCR NXT 0 H	11,10
UBI11 UCR NXT 1 H	11,10
UBI11 UCR NXT 2 H	11,10
UBI11 UCR NXT 3 H	11,10
UBI11 UCR NXT 4 H	11
UBI11 UCR NXT 5 H	11
UBI11 UCR NXT 6 H	11
UBI11 UCR SSYN H	11,10
UBI11 UCR SSYN L	11,07
UBI11 UCRV BUT 0 H	11,10
UBI11 UCRV BUT 1 H	11,10
UBI11 UCRV BUT 2 H	11,10
UBI11 XMIT UB DATA L	11,07
UBI12 BREAK CLK H	12
UBI12 BREAK L	12
UBI12 CON BR CLK H	12
UBI12 CON DONE SYNC H	12
UBI12 CON HALT L	15,12
UBI12 CON T READY SYNC H	12
UBI12 HALT DET BR SYNC H	12
UBI12 HALT DET SYNC H	12
UBI12 SERIAL LINE INT L	10,12
UBI12 SET BREAK L	12
UBI12 TU BR CLK H	12
UBI12 TU DONE SYNC H	12
UBI12 TU T READY SYNC H	12
UBI12 TU58 INT L	15,12
UBI13 ASSERT BBSY H	15,13
UBI13 BBSY REQ H	13
UBI13 BG EN H	13,15
UBI13 BG EN L	13,10
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UBI13 CMI UB REQ L	13
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SIGNAL NAME	PAGE NUMBER(S)
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UBI15 RCVD ACLO H	15
UBI15 RCVD DCLO H	14,15
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NOTES:
1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS | CHK | CHANGE NO. | REV

digital | DRN. | DATE 10-APR-84 | ENG. | DATE | TITLE: UBI FORWARD REFERENCE
CHK'D. | DATE | BOARD LOCATION: AC4 | SHEET 1 OF 1
DSKC:<DUVAL>UBI18.DRW 09-APR-84 17:17 | NEXT HIGHER ASSEMBLY: B-DD-L0004-0-0
FIRST USED ON OPTION/MODEL: 11/750
SIZE K | CODE CS | NUMBER L0004-0-18 | REV. H

SIGNAL NAME	PAGE NUMBER(S)
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UBUS A08 L	04,05
UBUS A09 L	04,05
UBUS A10 L	04,05
UBUS A11 L	04,05
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UBUS BG7 0 H	04,15
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UBUS BR5 L	04,15
UBUS BR6 L	04,15
UBUS BR7 L	04,15
UBUS C0 L	04,06
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UBUS D03 L	04,07
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UBUS D11 L	07,04
UBUS D12 L	07,04
UBUS D13 L	07,04
UBUS D14 L	07,04
UBUS D15 L	07,04
UBUS DCLO L	04,01,15
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UBUS MSYN L	10,04
UBUS NPG H	15,04
UBUS NPR L	15,04
UBUS PA L	10,04
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UBUS SACK L	15,04
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WBUS 16 H	02,01,15,12

SIGNAL NAME	PAGE NUMBER(S)
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WBUS 18 H	01,02,15,12
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WBUS 20 H	01,02,15,12
WBUS 21 H	01,02,15,12
WBUS 22 H	01,02,15,12
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WBUS 24 H	01,15,12
WBUS 25 H	01,15,12
WBUS 26 H	01,15
WBUS 27 H	01

SIGNAL NAME	PAGE NUMBER(S)

NOTES:
1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS		
CHK	CHANGE NO.	REV

digital

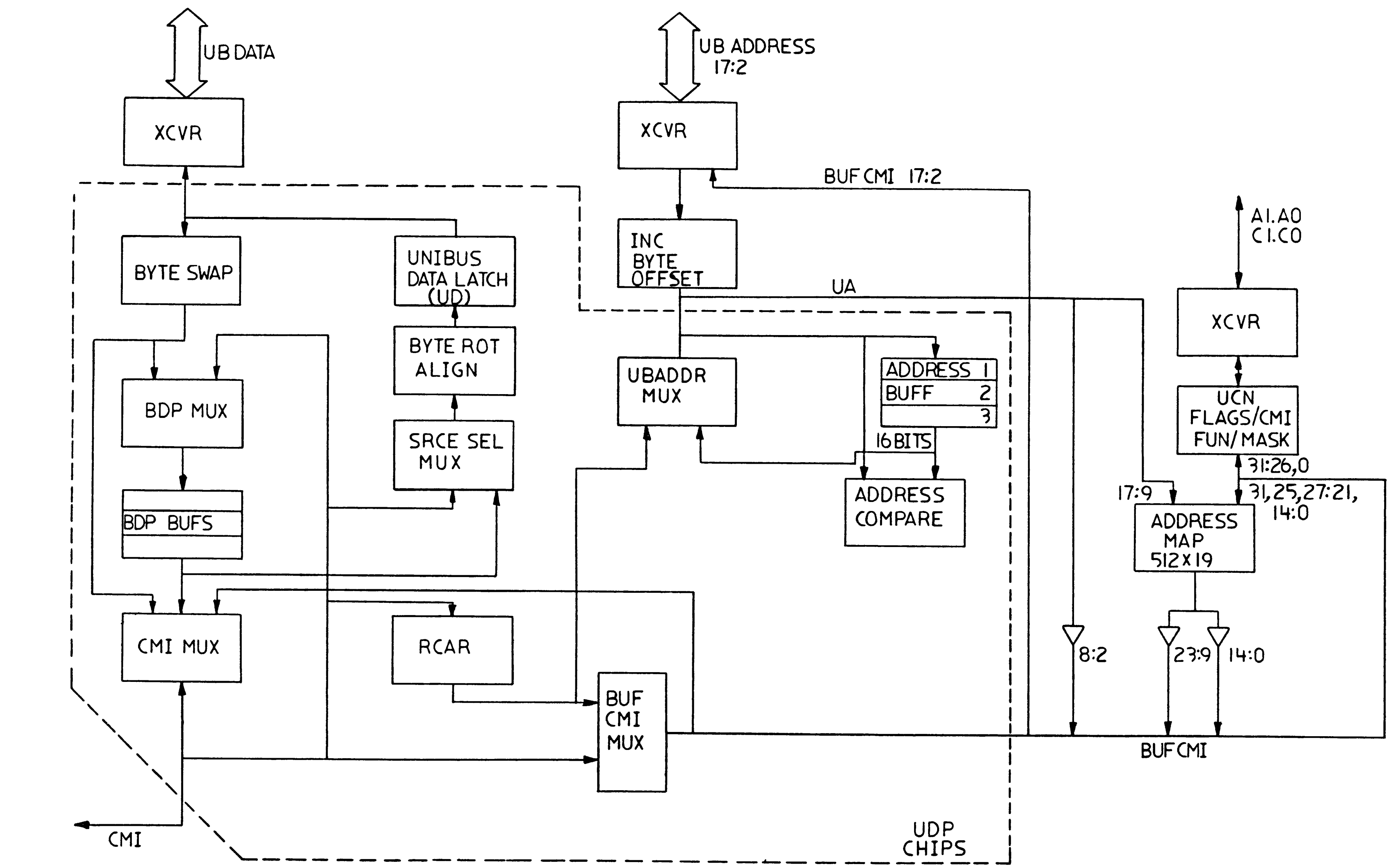
DRN. DG 20-MAR-80 | DATE | ENG. | DATE
CHK'D. | DATE | BOARD LOCATION: AC4 SHEET 1 OF 1

[160,127]UBI19.DRW 21-MAR-80 14:31 | NEXT HIGHER ASSEMBLY: B-DD-L0004-0-0

FIRST USED ON OPTION/MODEL: 11/750

TITLE: UBI FORWARD REFERENCE

SIZE	CODE	NUMBER	REV.
D	CS	L0004-0-19	C



BDPC 2	1	0	
0	0	0	IDLE
0	0	1	BDP ← CMI UD ← CMI
0	1	1	UD ← CMI FOR WRAP AROUND
1	0	0	BDP ← UNIBUS BYTE ∅
1	0	1	BDP ← UNIBUS (2 BYTES)
1	1	0	BDP ← UNIBUS (1 BYTES)

PRTC 2	1	0	
0	0	0	IDLE
0	0	1	UNIBUS DEVICE DOING DATI
0	1	0	PUT BUFCMI ON CMI FOR ADDRESS
0	1	1	PUT ADDRESS REG IN UDP ON UA (PURGE)
1	0	0	UNIBUS DEVICE DOING DATO
1	0	1	CPU DOING UNIBUS WRITE
1	1	1	CPU DOING UNIBUS READ

SC 1	0	
0	0	WRITE MAP/CSR
0	1	READ MAP/CSR
1	0	IDLE

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

DRN. T. McCullough 3/21/80
CHK'D L. Lewen 3/21/80
ENG. S. Smith 3/21/80
PROJ. ENG. D. Cane 3/21/80
PROD. 3/21/80

FIRST USED ON 11750

digital

TITLE UNIBUS INTERFACE

NEXT HIGHER ASSY. L0004-0-0

SIZE D CODE BD NUMBER L0004-0-20 REV. C

SCALE —/— SHEET 1 OF 1

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TW


```
                ;1      .TOC "COMET UNIBUS INTERFACE MICROCODE REV 015 12/19/79"
                ;2      ;
                ;3      ;001 7/23/79    DC FIXED DEFINITION OF UA.CTRL;RCV AND RVC.INCR WERE SWAPPED
                ;4      ;               FIXED DDP  AND BDP DATI CODE TO HOLD BYTE 0 OF DATA IN UD
                ;5      ;               LATCH FOR OFFSET CASE.
                ;6      ;               ONLY E8,E7 CHANGE
                ;7      ;002 7/23/79    DC FIXED SEQUENCE AT BEGINNING OF READ SO AS TO NOT
                ;8      ;               CAUSE UDP'S TO DRIVE UA BUS.  E8,E7 CHANGE
                ;9      ;003 7/23/79    PB CHANGED DEFAULT OF UA.CTRL TO "2" TO GO ALONG WITH CHANGE
                ;10     ;               FOR REV 001.
                ;11     ;004 7/24/79    DC ADDED CONSTRAINED WORD IN DDP.DATO WRAP CODE
                ;12     ;               TO ALLOW UBI TO HOLD DATO DATA ON BUS PROPERLY
                ;13     ;               ALL ROMS
                ;14     ;005 7/24/79    DC FIXED BDP DATI CODE TO HOLD BYTE 0 ON WRAP-CHANGE
                ;15     ;               TO UBDATA FIELD TO KEEP HI-Z.  E9 CHANGES
                ;16     ;006 7/24/79    DC FIXED DATOB BDP NO WRITE TO ASSERT SSYN BEFORE
                ;17     ;               CHECKING TO SEE IF ITS THERE.  E12,E11 CHANGE
                ;18     ; 6A 8/13       DC CHANGED PFORMT CONTROL FILE TO BLAST BDPC FIELD LOW TRUE
                ;19     ;               ONLY E7 CHANGES
                ;20     ;007 9/14/79    DC ADDED ARB FOR CMI DURING WRAP AROUND READS AND WRITES
                ;21     ;               TO KEEP CMI DURING BOTH SETS
                ;22     ; 7A 9/18/79    DC CHANGED PFORMT CONTROL TTO BLAST BUT<1> LOW TRUE
                ;23     ;               ONLY E10 CHANGES
                ;24     ;009 9/21/79    CHANGED MAIN.20, ALL ROMS
                ;25     ; 9A 9/24/79    DC CHANGED PFORMT TO BLAST BUT<0> LOW TRUE
                ;26     ;               E10 CHANGES
                ;27     ;010 9/26/79    CHANGED BDP.DATI.50, DDP.40 AND DDP.47 TO BUT ON
                ;28     ;               SSYN INSTEAD OF MSYN
                ;29     ;013 10/9       DC NUMEROUS CHANGES TO FIX UNALIGNED AND PB PROBLEMS
                ;30     ;015 12/19/79   DC FIX TO CPU.RD TO PREVENT IT FROM LEAVING
                ;31     ;               GARBAGE ON THE CMI. E8,E9 CHANGE
                ;32
```

```
;33      .TOC "FIELD DEFINITIONS"
;34      .RTOL
;35      .HEXADECIMAL
;36      ;
;37      ;
;38      ;CODE DIVIDED INTO ROMS AS FOLLOWS:
;39      ;       <23:20> E12
;40      ;       <19:16> E11
;41      ;       <15:12> E7
;42      ;       <11:8>  E8
;43      ;       <7:4>   E9
;44      ;       <3:0>   E10
;45      ;
;46      ;
;47      BUFCMI/=<23:23>, .DEFAULT=0
;48              ADDR=1          ;PUT MAP PFN AND LOW BITS OF UBUS ADDR ON BUFCMI
;49              HI-Z=0
;50
;51      NEXT/=<22:16>, .NEXTADDRESS
;52
;53      BDPC/=<15:13>,.DEFAULT=0                ;CONTROLS BDP DATA/ADDR LATCHES
;54              DATI=1          ;BDP<-CMI, UD<-CMI/BDP (NOT BYTE 0 IF BYTE OFFSET),ADDR
;55              DATIW=3         ;UD<-BDP/CMI
;56              DATOW=4         ;BDP BYTE 0<-UNIBUS DATA,ADDR
;57              DATO=5          ;BDP<-UNIBUS DATA (2 BYTES) FUNCTION OF A1,OFFSET,ADDR
;58              DATOB=6         ;BDP<-UNIBUS DATA (1 BYTE) FUNCTION OF A1,OFFSET,ADDR
;59
;60      PRTC/=<12:10>, .DEFAULT=0               ;CONTROLS DATA PORTS ON UDP CHIPS
;61              DATI=1          ;UBUS DEVICE DOING DATI(P)
;62              UB.ADDR=2       ;ADDRESS FROM UBUS TO CMI
;63              PURGE.ADDR=3    ;ADDRESS FROM BAR TO CMI
;64              DATO=4
;65              CPU.WRT=5
;66              CPU.RD=7
;67
;68      UA.CTRL/=<9:8>, .DEFAULT=2              ;CONTROLS UNIBUS ADDRESS XCVRS
;69              XMIT=0          ;DRIVE UNIBUS ADDRESS LINES
;70              HI-Z=1
;71              RCV.INCR=3      ;RECIEIVE AND INCREMENT UNIBUS ADDRESS
;72              RCV=2           ;RECEIVE UNIBUS ADDRESS
;73
;74      MSYN/=<7:7>, .DEFAULT=0
;75              ASSERT=1
;76
;77
```

tw


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;78      SSYN/=<6:6>, .DEFAULT=0
;79              ASSERT=1
;80
;81      UBDATA/=<5:4>, .DEFAULT=2               ;CONTROLS UBUS DATA XCVRS
;82              RCV=2
;83              DRIVE.UD=1      ;DRIVE UBUS DATA LINES
;84              DRIVE.UD.NOPB=3 ;DRIVE UBUS DATA BUT NOT PB LINES
;85              HI-Z=0
;86
;87      CMI.ARB/=<3:3>, .DEFAULT=0
;88              REQUEST=1
;89
;90      BUT/=<2:0>, .DEFAULT=0
;91
;92              EMPTY=1         ;<MSYN, EMPTY PURGE>
;93              ARB=2           ;<MSYN, WON THE BUS L>
;94              SET.FLAG=3      ;<MSYN, WON THE BUS L>, FLAGS<-0001
;95              UB.STATUS=4     ;<MSYN, SSYN OR TIMOUT>
;96              CLK.FLAGS=5     ;<MSYN, SSYN OR TIMOUT>, CLOCK FLAGS
;97              CMI.STATUS=6    ;<WRAP L, DBBZ L, NXM L>
;98              FIRST.FORK=7    ;0000 BDP DATOB CMI WRITE NEEDED
;99                              ;0001 BDP DATO CMI WRITE NEEDED
;100                             ;0010 BDP DATOB NO WRITE
;101                             ;0011 BDP DATO NO WRITE, OR WRAP WITH NO MATCH
;102                             ;0100 BDP DATI  WRAP  1ST WORD AVAILABLE
;103                             ;0101 BDP DATI DATA AVAILABLE
;104                             ;0110 BDP DATOB  OFFSET PUTS IN NEXT LONGWORD
;105                             ;0111 BDP DATI NO DATA AVAILABLE
;106                             ;1000 CPU WRITE
;107                             ;1001 CPU READ
;108                             ;1010 DDP DATO(B)
;109                             ;1011 DDP DATI(P)
;110                             ;1100 PURGE
;111                             ;1101 PURGE
;112                             ;1110 DDP DATOB OFFSET PUTS IN NEXT LONGWORD, OR INT
;113                             ;1111 NOTHING GOING ON
;114
```

```
                ;115    REQ.WRT?        "CMI.ARB/REQUEST,PRTC/UB.ADDR,BUT/ARB,BUFCMI/ADDR"
                ;116    REQ.RD?         "CMI.ARB/REQUEST,PRTC/UB.ADDR,BUT/ARB,UBDATA/HI-Z,BUFCMI/ADDR"
                ;117    REQ.PUR?        "CMI.ARB/REQUEST,PRTC/PURGE.ADDR,UA.CTRL/HI-Z,BUT/ARB,BUFCMI/ADDR"
                ;118    EMPTY?          "BUT/EMPTY"
                ;119    FIRST.FORK?     "BUT/FIRST.FORK,NEXT/MAIN.LOOP"
                ;120    CMI.STAT?       "BUT/CMI.STATUS"
                ;121    UB.STAT?        "BUT/UB.STATUS"
                ;122
                ;123    SSYN            "SSYN/ASSERT"
                ;124    MSYN            "MSYN/ASSERT"
                ;125    INCR            "UA.CTRL/RCV.INCR"
                ;126    REQ             "CMI.ARB/REQUEST"
                ;127
                ;128    DP_CMI          "BDPC/DATI,PRTC/DATI,UBDATA/HI-Z"
                ;129    DP_CMI.W        "BDPC/DATIW,PRTC/DATI,UBDATA/HI-Z,BUFCMI/ADDR"
                ;130    UB_CMI.WRT      "PRTC/CPU.WRT,UBDATA/DRIVE.UD,UA.CTRL/XMIT"
                ;131    UB_CMI.WRT.NOPB "PRTC/CPU.WRT,UBDATA/DRIVE.UD,NOPB,UA.CTRL/XMIT"
                ;132    UB_CMI.ADDR     "PRTC/CPU.RD,UA.CTRL/XMIT"
                ;133    UB.RD_DP        "PRTC/DATI,UBDATA/DRIVE.UD"
                ;134    REQ.XTRA?       "CMI.ARB/REQUEST,PRTC/UB.ADDR,BUT/SET.FLAG,UA.CTRL/RCV.INCR,BUFCMI/ADDR"
                ;135    HOLD.B0         "BDPC/DATI,UBDATA/HI-Z"
                ;136
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TW


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                ;137    .TOC "FIRST FORK BREAKOUT"
                ;138    =0000
                ;139    MAIN.LOOP:                      ;THIS IS THE TOP OF FIRST FORK
                ;140            ;0000-------------------;
                ;141            BUT/CLK.FLAGS,          ;BDP DATOB; CMI WRITE
                ;142            BDPC/DATOB,
U 000, 4BC2,25  ;143            NEXT/BDP.DATO
                ;144
                ;145            ;0001-------------------;
                ;146            BUT/CLK.FLAGS,          ;BDP DATO; CMI WRITE
                ;147            BDPC/DATO,              ;PUT DATA IN BUFFER
U 001, 4BA2,25  ;148            NEXT/BDP.DATO
                ;149
                ;150            ;0010-------------------;
                ;151            BDPC/DATOB,             ;BDP DATOB,BUFFER NOT  FULL
                ;152            BUT/CLK.FLAGS,
U 002, 1FC2,25  ;153            NEXT/BDP.DATO.20
                ;154
                ;155            ;0011-------------------;
                ;156            BDPC/DATO,              ;BDP DATO,BUFFER NOT FULL
                ;157            BUT/CLK.FLAGS,          ;OR OFFSET CAUSING WRAPAROUND
U 003, 12A2,25  ;158            NEXT/MAIN.20
                ;159
                ;160            ;0100-------------------;
                ;161            BDPC/DATIW,             ;BDP DATI,LONGWORD WRAP
                ;162            REQ.RD?,INCR,
U 004, D46B,0A  ;163            NEXT/BDP.DATI.30        ;FIRST WORD IS IN THE BUFFER
                ;164
                ;165            ;0101-------------------;
                ;166            PRTC/DATI,BDPC/DATIW,   ;BDP DATI,DATA AVAILABLE IN
                ;167            UBDATA/HI-Z,REQ,        ;BUFFER**************
U 005, 2F66,08  ;168            NEXT/BDP.DATI.45
                ;169
                ;170            ;0110-------------------;
                ;171            BDPC/DATOW,             ;BDP DATOB,OFFSET PUTS BYTE
                ;172            INCR,BUT/SET.FLAG,      ;IN NEXT LONGGWORD
U 006, 1F83,23  ;173            NEXT/BDP.DATO.20
                ;174
                ;175            ;0111-------------------;
                ;176            REQ.RD?,                ;BDP DATI,BUFFER EMPTY
U 007, D00A,0A  ;177            NEXT/BDP.DATI.10
                ;178
```

```
                ;179    ;THIS PAGE HOLDS THE SECOND EIGHT PLACES WHERE THE FIRST FORK GOES TO
                ;180
                ;181            ;1000----------------;
                ;182            PRTC/CPU.WRT,           ;CPU DOING WRITE TO UNIBUS
                ;183            UBDATA/HI-Z,            ;GET READY TO ASSERT STUFF
                ;184            UA.CTRL/HI-Z,           ;ON UNIBUS
                ;185            UB.STAT?,               ;CHECK SSYN REMOVED FROM UBUS
U 008, 1015,04  ;186            NEXT/CPU.WRT            ;GO TIME DESKEW INTERVAL
                ;187
                ;188            ;1001----------------;
                ;189            PRTC/CPU.RD,            ;CPU DOING READ FROM UNIBUS
                ;190            UA.CTRL/HI-Z,
                ;191            UB.STAT?,               ;SEE COMMENTS ABOVE
U 009, 141D,24  ;192            NEXT/CPU.RD
                ;193
                ;194            ;1010----------------;
                ;195            REQ.WRT?,               ;DDP DATO(B)
U 00A, DC0A,2A  ;196            NEXT/DDP.DATO
                ;197
                ;198            ;1011----------------;
                ;199            REQ.RD?,                ;DDP DATI
U 00B, F00A,0A  ;200            NEXT/DDP.DATI
                ;201
                ;202            ;1100----------------;
                ;203            EMPTY?,                 ;PURGE, CHECK FOR EMPTY
U 00C, 7602,21  ;204            NEXT/PURGE
                ;205
                ;206            ;1101----------------;
                ;207            EMPTY?,                 ;PURGE, CHECK FOR EMPTY
U 00D, 7602,21  ;208            NEXT/PURGE
                ;209
                ;210            ;1110----------------;
                ;211            REQ.XTRA?,              ;DDP DATOB WRAP TO NEXT LONGWORD
U 00E, E00B,2B  ;212            NEXT/DDP.DATO,20        ;ALSO HERE FOR INTERRUPTS
                ;213
                ;214    IDLE:
                ;215            ;1111----------------;
U 00F, 0002,27  ;216            FIRST.FORK?             ;NOTHING GOING ON, KEEP TRYING
                ;217
                ;218    =1*
                ;219    MAIN.20:                        ;HERE TO SEE IF ;0011 WAS NO WRITE OR OFFSET
                ;220            ;--------------------;
U 012, 1302,26  ;221            BUT/CMI.STATUS          ;NOW THAT UDP ADDR IS THERE, TRY AGAIN
                ;222
                ;223    =011
                ;224            ;011-----------------;
                ;225            REQ.WRT?,               ;WRAP AROUND, WRITE NEEDED
U 013, C80A,2A  ;226            NEXT/BDP.DATO,05
                ;227
                ;228            ;111-----------------;
U 017, 6B02,60  ;229            SSYN,NEXT/DDP.45        ;NO WRITE NEEDED
                ;230
```

TW


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                ;231    .TOC "CPU READS AND WRITES TO THE UNIBUS ARE HANDLED IN THIS SECTION"
                ;232    =0
                ;233    CPU.WRT:
                ;234            ;0---------------------;
                ;235            UB_CMI.WRT,             ;BRANCH COMES HERE IF SSYN NOT ASSERTED
U 010, 1614,10  ;236            NEXT/CPU.WRT.10         ;ASSERT ADDRESS AND DATA ON UNIBUS
                ;237
                ;238            ;1---------------------;
                ;239            UB_CMI.WRT,             ;HERE IF SSYN LEFT ASSERTED FROM
                ;240            UB.STAT?,               ;LAST UBUS TRANSACTION
U 011, 1014,14  ;241            NEXT/CPU.WRT
                ;242
                ;243    CPU.WRT.10:
                ;244            ;---------------------;
U 016, 2A14,30  ;245            UB_CMI.WRT.NOPB         ;EATING UP TIME FOR ADDR/DATA
                ;246                                    ;TO MSYN DESKEW
                ;247    =10
                ;248    CPU.WRT.20:
                ;249            ;10--------------------;
                ;250            MSYN,UB.STAT?,          ;ASSERT MSYN AND WAIT FOR SSYN
                ;251            UB_CMI.WRT.NOPB,
U 02A, 2A14,B4  ;252            NEXT/CPU.WRT.20
                ;253
                ;254            ;11--------------------;
U 02B, 2814,30  ;255            UB_CMI.WRT.NOPB         ;MSYN REMOVED,BECAUSE SSYN ARRIVED
                ;256
                ;257    CPU.WRT.25:
                ;258            ;---------------------;
                ;259            UA.CTRL/HI-Z,           ;PREVENT TRISTATE OVERLAP
U 028, 0F01,20  ;260            NEXT/IDLE
                ;261
```

K-MP-L0004-0-21-C

```
                ;262    ;THIS SECTION FOR CPU READS TO UNIBUS
                ;263    =0
                ;264    CPU.RD:
                ;265            ;0----------------------;
                ;266            UB_CMI.ADDR,            ;SSYN REMOVED FROM LAST TRANSACTION
U 014, 291C,20  ;267            NEXT/CPU.RD,10          ;ASSERT ADDRESS AND BEGIN DESKEW TIME
                ;268
                ;269            ;1----------------------;
                ;270            UB_CMI.ADDR,            ;SSYN STILL ASSERTED, DON'T COUNT
                ;271            UB.STAT?,               ;DESKEW TIME YET
U 015, 141C,24  ;272            NEXT/CPU.RD
                ;273
                ;274    CPU.RD.10:
                ;275            ;----------------------;
U 029, 3A1C,20  ;276            UB_CMI.ADDR             ;EAT 125 FOR DESKEW
                ;277
                ;278    =10
                ;279    CPU.RD.20:
                ;280            ;10---------------------;
                ;281            UB_CMI.ADDR,            ;ASSERT MSYN AND WAIT FOR SSYN
                ;282            MSYN,UB.STAT?,
U 03A, 3A1C,A4  ;283            NEXT/CPU.RD.20
                ;284
                ;285            ;11---------------------;
U 03B, 381C,A0  ;286            UB_CMI.ADDR,MSYN        ;KEEP MSYN SO SLAVE HOLDS DATA
                ;287
                ;288            ;----------------------;
                ;289            PRTC/CPU.WRT,           ;KEEP ADDRESS ON UNIBUS
                ;290            UBDATA/HI-Z,UA.CTRL/XMIT,
U 038, 2814,00  ;291            NEXT/CPU.WRT.25
                ;292
```

TW


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                ;293    .TOC "DATO THROUGH BUFFERED DATA PATH"
                ;294    ;DATO(B) THROUGH BDP THAT NEEDS TO DO A CMI WRITE
                ;295    =00
                ;296    BDP.DATO.05:
                ;297            ;00---------------------;MSYN DISAPPEARED JUST AS WE WON THE BUS
                ;298            PRTC/DATO,CMI.STAT?,    ;GO THROUGH WITH IT ANYWAY, WE'RE ALREADY ON BUS
                ;299            BUFCMI/ADDR,
U 048, 9812,26  ;300            NEXT/BDP.DATO,10
                ;301
                ;302            ;01---------------------;
U 049, 0F02,20  ;303            NEXT/IDLE               ;LOST MSYN, ABORT
                ;304
                ;305            ;10---------------------;
                ;306            PRTC/DATO,CMI.STAT?,    ;BUS WON, ASSERT DATA NEXT CYCLE
                ;307            BUFCMI/ADDR,            ;
U 04A, 9812,26  ;308            NEXT/BDP.DATO,10        ;AND CHECK FOR LONGWORD WRAP&DBBZ
                ;309    BDP.DATO:
                ;310            ;11---------------------;
                ;311            REQ.WRT?,               ;WAITING TO WIN THE CMI
U 04B, C80A,2A  ;312            NEXT/BDP.DATO,05
                ;313    =000
                ;314    BDP.DATO.10:
                ;315    ;THE NEXT FOUR ENTRIES OCCUR FOR THE OFFSET CASE WHERE THE DATA WRAPS
                ;316            ;000--------------------;
                ;317            PRTC/DATO,CMI.STAT?,    ;DBBZ STILL HELD ON BUS, KEEP WAITING
U 018, 1812,26  ;318            NEXT/BDP.DATO,10
                ;319
                ;320            ;001--------------------;
                ;321            PRTC/DATO,CMI.STAT?,    ;DBBZ STILL HELD ON BUS, KEEP WAITING
U 019, 1812,26  ;322            NEXT/BDP.DATO,10
                ;323
                ;324            ;010--------------------;
U 01A, 6F02,20  ;325            NEXT/DDP.50             ;NXM
                ;326
                ;327            ;011--------------------;
                ;328            INCR,BDPC/DATOW,        ;DBBZ HAS GONE AWAY, PUT BYTE IN
                ;329            BUT/SET.FLAG,           ;BDP REGS AND SET FLAGS
U 01B, 1F83,23  ;330            NEXT/BDP.DATO,20
                ;331
                ;332    ;THESE FOUR ARE FOR NO WRAP AROUND
                ;333            ;100--------------------;
                ;334            PRTC/DATO,CMI.STAT?,    ;NO WRAP AROUND, DBBZ STILL ASSERTED
U 01C, 1812,26  ;335            NEXT/BDP.DATO,10        ;SO KEEP THE DATA ON THE BUS
                ;336
                ;337            ;101--------------------;
                ;338            PRTC/DATO,CMI.STAT?,    ;NO WRAP AROUND, DBBZ STILL ASSERTED
U 01D, 1812,26  ;339            NEXT/BDP.DATO,10        ;SO KEEP THE DATA ON THE BUS
                ;340
                ;341            ;110--------------------;
U 01E, 6F02,20  ;342            NEXT/DDP.50             ;NXM
                ;343
                ;344    BDP.DATO.20:
                ;345            ;111--------------------;
U 01F, 6B02,60  ;346            SSYN,NEXT/DDP.45        ;DBBZ WENT AWAY, ASSERT SSYN
                ;347
```

```
                ;348    .TOC "BDP DATI'S"
                ;349    ;HERE FOR BDP DATI'S THAT NEED CMI ACTION
                ;350    =00
                ;351    BDP.DATI.10:
                ;352            ;00=====================;
                ;353            CMI.STAT?,              ;GOT THE BUS, JUST AS WE LOST MSYN
                ;354            BUFCMI/ADDR,
U 050, A002,26  ;355            NEXT/BDP.DATI.20
                ;356
                ;357            ;01=====================;
U 051, 0F02,20  ;358            NEXT/IDLE               ;LOST MYSN, ABORT
                ;359
                ;360            ;10=====================;
                ;361            CMI.STAT?,              ;GOT THE BUS ,GET READY FOR DATA
                ;362            BUFCMI/ADDR,
U 052, A002,26  ;363            NEXT/BDP.DATI.20
                ;364
                ;365            ;11=====================;
                ;366            REQ.RD?,                ;WE GOT HERE CAUSE WE DIDN'T WIN THE BUS
U 053, D00A,0A  ;367            NEXT/BDP.DATI.10
                ;368    =000
                ;369    BDP.DATI.20:
                ;370    ;THESE FOUR  ARE FOR THE DATA WRAP AROUND CASE
                ;371            ;000====================;
                ;372            DP_CMI,CMI.STAT?,REQ,   ;DBBZ STILL ASSERTED, KEEP WAITING
U 020, 2026,0E  ;373            NEXT/BDP.DATI.20
                ;374
                ;375            ;001====================;
                ;376            DP_CMI,CMI.STAT?,REQ,   ;DBBZ STILL ASSERTED, KEEP WAITING
U 021, 2026,0E  ;377            NEXT/BDP.DATI.20
                ;378
                ;379            ;010====================;
U 022, 6F02,20  ;380            NEXT/DDP.50             ;DBBZ GONE, NXM STATUS RETURNED
                ;381
                ;382            ;011====================;
                ;383            BDPC/DATIW,             ;DATA IN BUFFER, NOW MOVE TO UD
                ;384            UBDATA/HI-Z,REQ,
U 023, 5762,08  ;385            NEXT/BDP.DATI.35
                ;386
                ;387    ;THESE FOUR ENTRIES ARE FOR NO WRAP-AROUND
                ;388            ;100====================;
                ;389            DP_CMI,CMI.STAT?,       ;DBBZ STILL ASSERTED, KEEP WAITING
U 024, 2026,0E  ;390            NEXT/BDP.DATI.20,REQ    ;******REMOVE REQ WITH UCN-C
                ;391
                ;392            ;101====================;
                ;393            DP_CMI,CMI.STAT?,       ;DBBZ STILL ASSERTED, KEEP WAITING
U 025, 2026,0E  ;394            NEXT/BDP.DATI.20,REQ    ;******REMOVE REQ WITH UCN-C
                ;395
                ;396            ;110====================;
U 026, 6F02,20  ;397            NEXT/DDP.50             ;DBBZ GONE, NXM STATUS RETURNED
                ;398
                ;399            ;111====================;
                ;400            UB.RD_DP,SSYN,          ;DBBZ'S GONE, WE GOT THE DATA
U 027, 5B06,58  ;401            NEXT/BDP.DATI.55,REQ    ;******REMOVE REQ WITH UCN-C
                ;402
```

TW


```
                ;403
                ;404    =00
                ;405    BDP.DATI.30:
                ;406            ;00=====================;
                ;407            HOLD.B0,CMI.STAT?,      ;GOT THE BUS ,GET READY FOR DATA
                ;408            BUFCMI/ADDR,INCR,
U 054, AC23,06  ;409            NEXT/BDP.DATI.40
                ;410
                ;411            ;01=====================;
U 055, 0F02,20  ;412            NEXT/IDLE               ;LOST MSYN,ABORT
                ;413
                ;414            ;10=====================;
                ;415            HOLD.B0,CMI.STAT?,      ;GOT THE BUS ,GET READY FOR DATA
                ;416            BUFCMI/ADDR,INCR,
U 056, AC23,06  ;417            NEXT/BDP.DATI.40
                ;418
                ;419    BDP.DATI.35:
                ;420            ;11=====================;
                ;421            REQ.RD?,INCR,BDPC/DATI, ;GET THE BUS FOR THE SECOND
U 057, D428,0A  ;422            NEXT/BDP.DATI.30
                ;423
                ;424    =100
                ;425    BDP.DATI.40:
                ;426            ;100====================;
                ;427            DP_CMI,CMI.STAT?,INCR,  ;DBBZ STILL ASSERTED, KEEP WAITING
U 02C, 2C27,0E  ;428            NEXT/BDP.DATI.40,REQ    ;******REMOVE REQ WITH UCN-C
                ;429
                ;430            ;101====================;
                ;431            DP_CMI,CMI.STAT?,INCR,  ;DBBZ STILL ASSERTED, KEEP WAITING
U 02D, 2C27,0E  ;432            NEXT/BDP.DATI.40,REQ    ;******REMOVE REQ WITH UCN-C
                ;433
                ;434            ;110====================;
U 02E, 6F02,20  ;435            NEXT/DDP.50             ;DBBZ GONE, NXM STATUS RETURNED
                ;436
                ;437    BDP.DATI.45:
                ;438            ;111====================;
                ;439            UB.RD_DP,SSYN,          ;DBBZ'S GONE, WE GOT THE DATA
U 02F, 5B06,58  ;440            NEXT/BDP.DATI.55,REQ    ;******REMOVE REQ WITH UCN-C
                ;441
                ;442    =10
                ;443    BDP.DATI.50:
                ;444            ;01=====================;
U 05A, 0002,27  ;445            FIRST.FORK?             ;NO MSYN, REMOVE DATA AND SSYN
                ;446
                ;447    BDP.DATI.55:
                ;448            ;11=====================;
                ;449            UB.RD_DP,               ;
                ;450            SSYN,UB.STAT?,          ;WAIT FOR MSYN TO GO AWAY
U 05B, 5A06,5C  ;451            NEXT/BDP.DATI.50,REQ    ;******REMOVE REQ WITH UCN-C
                ;452
                ;453
```

```
                ;454    .TOC "THIS SECTION HANDLES DATO'S TO THE DDP"
                ;455    =00
                ;456    DDP.DATO:
                ;457            ;00--------------------;
                ;458            PRTC/DATO,BUFCMI/ADDR,  ;WE GOT IT
                ;459            CMI.STAT?,
U 05C, B012,26  ;460            NEXT/DDP.DATO.10
                ;461
                ;462            ;11--------------------;
U 05D, 0F02,20  ;463            NEXT/IDLE               ;MSYN DISAPPEARED
                ;464
                ;465            ;10--------------------;
                ;466            PRTC/DATO,BUFCMI/ADDR,  ;WE GOT IT
                ;467            CMI.STAT?,
U 05E, B012,26  ;468            NEXT/DDP.DATO.10
                ;469
                ;470            ;11--------------------;
                ;471            REQ.WRT?,               ;TRYING TO GET THE BUS
U 05F, DC0A,2A  ;472            NEXT/DDP.DATO
                ;473
                ;474    =000
                ;475    DDP.DATO.10:
                ;476    ;THE FOUR CASES ARE FOR THE WRAPAROUND SITUATION
                ;477
                ;478            ;000-------------------;
                ;479            PRTC/DATO,CMI.STAT?,    ;WAITING FOR DBBZ
U 030, 3012,2E  ;480            REQ,NEXT/DDP.DATO.10
                ;481
                ;482            ;001-------------------;
                ;483            PRTC/DATO,CMI.STAT?,    ;WAITING FOR DBBZ
U 031, 3012,2E  ;484            REQ,NEXT/DDP.DATO.10
                ;485
                ;486            ;010-------------------;
U 032, 6F02,20  ;487            NEXT/DDP.50             ;NXM STATUS
                ;488
                ;489            ;011-------------------;
                ;490            REQ.XTRA?,              ;DONE WITH THE FIRST, DO THE SECOND
U 033, E00B,2B  ;491            NEXT/DDP.DATO.20
                ;492
                ;493    ;THESE CASES ARE FOR NO WRAP
                ;494            ;100-------------------;
                ;495            PRTC/DATO,CMI.STAT?,    ;WAITING FOR DBBZ
U 034, 3012,26  ;496            NEXT/DDP.DATO.10
                ;497
                ;498            ;101-------------------;
                ;499            PRTC/DATO,CMI.STAT?,    ;WAITING FOR DBBZ
U 035, 3012,26  ;500            NEXT/DDP.DATO.10
                ;501
                ;502            ;110-------------------;
U 036, 6F02,20  ;503            NEXT/DDP.50             ;NXM STATUS
                ;504
                ;505            ;111-------------------;
U 037, 6B02,60  ;506            SSYN,NEXT/DDP.45        ;DONE
                ;507
```



```
                ;508    ;THIS PAGE CONTINUES THE DDP DATO WRAP CASE CODE,
                ;509    ;AND ALSO HAS THE WAITING FOR MSYN TO GO AWAY STUFF
                ;510    =00
                ;511    DDP.DATO.20:
                ;512            ;00--------------------;
                ;513            PRTC/DATO,BUT/SET.FLAG, ;BUS WON
                ;514            INCR,BUFCMI/ADDR,       ;
U 060, E713,23  ;515            NEXT/DDP.DATO.25
                ;516
                ;517            ;01--------------------;
U 061, 0F02,20  ;518            NEXT/IDLE               ;MSYN WENT AWAY
                ;519
                ;520            ;10--------------------;
                ;521            PRTC/DATO,BUT/SET.FLAG, ;BUS WON
                ;522            INCR,BUFCMI/ADDR,       ;
U 062, E713,23  ;523            NEXT/DDP.DATO.25
                ;524
                ;525            ;11--------------------;
                ;526            REQ.XTRA?,              ;TRYING TO GET THE BUS
U 063, E00B,2B  ;527            NEXT/DDP.DATO.20
                ;528    =11
                ;529    DDP.DATO.25:
                ;530            ;11--------------------;
U 067, 3C12,26  ;531            PRTC/DATO,CMI.STAT?     ;THIS IS CONSTRAINED AS TARGET OF SET.FLAG
                ;532    =100
                ;533    DDP.DATO.30:
                ;534            ;100-------------------;
                ;535            PRTC/DATO,CMI.STAT?,    ;WAITING FOR NO DBBZ
U 03C, 3C12,26  ;536            NEXT/DDP.DATO.30        ;
                ;537
                ;538            ;101-------------------;
                ;539            PRTC/DATO,CMI.STAT?,    ;WAITING FOR NO DBBZ
U 03D, 3C12,26  ;540            NEXT/DDP.DATO.30        ;
                ;541
                ;542            ;110-------------------;
U 03E, 6F02,20  ;543            NEXT/DDP.50             ;NXM
                ;544
                ;545            ;111-------------------;
U 03F, 6B02,60  ;546            SSYN,NEXT/DDP.45        ;DONE
                ;547    =10
                ;548    DDP.40:
                ;549            ;10--------------------;
U 06A, 0002,27  ;550            FIRST.FORK?             ;NO MSYN, REMOVE DATA AND SSYN
                ;551    DDP.45:
                ;552            ;11--------------------;
                ;553            SSYN,UB.STAT?,          ;WAITING FOR MSYN OR INT TO GO AWAY
U 06B, 6A02,64  ;554            NEXT/DDP.40             ;BY SEEING IF SSYN GOT CLEARED
                ;555    =10
                ;556    DDP.47:
                ;557            ;01--------------------;
U 06E, 0002,27  ;558            FIRST.FORK?             ;NO MSYN, REMOVE DATA AND SSYN
                ;559    DDP.50:
                ;560            ;11--------------------;
U 06F, 6E02,24  ;561            UB.STAT?,NEXT/DDP.47    ;WAITING FOR MSYN TO GO AWAY
                ;562
```

```
                ;563    .TOC "THIS PAGE IS WHERE WE COME FOR DATI'S THROUGH THE DIRECT DATA PATH"
                ;564    ;
                ;565    ≡00
                ;566    DDP.DATI:
                ;567            ;00--------------------;
                ;568            CMI.STAT?,              ;GOT THE BUS,WAIT FOR DATA
                ;569            BUFCMI/ADDR,
U 070, C002,26  ;570            NEXT/DDP.DATI.10
                ;571
                ;572            ;01--------------------;
U 071, 0F02,20  ;573            NEXT/IDLE               ;LOST MSYN
                ;574
                ;575            ;10--------------------;
                ;576            CMI.STAT?,              ;GOT THE BUS,WAIT FOR DATA
                ;577            BUFCMI/ADDR,
U 072, C002,26  ;578            NEXT/DDP.DATI.10
                ;579
                ;580            ;11--------------------;
                ;581            REQ.RD?,                ;TRY TO GET THAT BUS
U 073, F00A,0A  ;582            NEXT/DDP.DATI
                ;583
                ;584    ≡000
                ;585    DDP.DATI.10:
                ;586    ;THESE FOUR ARE FOR THE WRAP CASE
                ;587            ;000-------------------;
                ;588            DP_CMI.W,CMI.STAT?,REQ, ;WAITING FOR DATA
U 040, C066,0E  ;589            NEXT/DDP.DATI.10
                ;590
                ;591            ;001-------------------;
                ;592            DP_CMI.W,CMI.STAT?,REQ, ;WAITING FOR DATA
U 041, C066,0E  ;593            NEXT/DDP.DATI.10
                ;594
                ;595            ;010-------------------;
U 042, 6F02,20  ;596            NEXT/DDP.50             ;NXM
                ;597
                ;598            ;011-------------------;
                ;599            REQ.RD?,INCR,BDPC/DATI, ;WE GOT THE FIRST, NOW DO THE SECOND
U 043, D42B,0A  ;600            NEXT/BDP.DATI.30
                ;601
                ;602            ;100-------------------;
                ;603            DP_CMI.W,CMI.STAT?,     ;WAITING FOR DATA, NO WRAP-AROUND
U 044, C066,0E  ;604            NEXT/DDP.DATI.10,REQ    ;******REMOVE REQ WITH UCN-C
                ;605
                ;606            ;101-------------------;
                ;607            DP_CMI.W,CMI.STAT?,     ;WAITING FOR DATA, NO WRAP-AROUND
U 045, C066,0E  ;608            NEXT/DDP.DATI.10,REQ    ;******REMOVE REQ WITH UCN-C
                ;609
                ;610            ;110-------------------;
U 046, 6F02,20  ;611            NEXT/DDP.50             ;NXM, WAIT THE MSYN OUT
                ;612
                ;613            ;111-------------------;
                ;614            UB.RD_DP,               ;DBBZ WENT AWAY
                ;615            SSYN,                   ;GIVE THE UBUS DATA, AND ISSUE SSYN
U 047, 5B06,58  ;616            NEXT/BDP.DATI.55,REQ    ;******REMOVE REQ WITH UCN-C
                ;617
```

TW


```
                ;618    .TOC "PURGE CODE"
                ;619    ;THIS PAGE HANDLES PURGES
                ;620
                ;621    ≡10
                ;622    PURGE:
                ;623            ;10--------------------;
                ;624            REQ.PUR?,               ;NOT EMPTY IF WE GET HERE
U 076, FA0D,2A  ;625            NEXT/PURGE.10
                ;626
                ;627            ;1---------------------;
U 077, 0F02,20  ;628            NEXT/IDLE               ;IF PUREG WAS EMPTY WE CLEARED IT
                ;629
                ;630    ≡10
                ;631    PURGE.10:
                ;632            ;10--------------------;
                ;633            PRTC/DATO,UA.CTRL/HI-Z,
                ;634            BUFCMI/ADDR,
U 07A, CD11,20  ;635            NEXT/PURGE.20
                ;636
                ;637            ;11--------------------;
                ;638            REQ.PUR?,
U 07B, FA0D,2A  ;639            NEXT/PURGE.10
                ;640
                ;641    ≡101
                ;642    PURGE.20:
                ;643            ;101-------------------;
                ;644            PRTC/DATO,CMI.STAT?,    ;DO WRITE AND WAIT FOR NO DBBZ
U 04D, 4D12,26  ;645            NEXT/PURGE.20
                ;646
                ;647            ;111-------------------;
U 04F, 0F02,20  ;648            NEXT/IDLE               ;ALL DONE
                ;649
```

```
                ;650    .TOC "POWER UP CODE"
                ;651    .REGION /80,0FF
                ;652
U 080, 0F02,20  ;653            NEXT/IDLE
U 081, 0F02,20  ;654            NEXT/IDLE
U 082, 0F02,20  ;655            NEXT/IDLE
U 083, 0F02,20  ;656            NEXT/IDLE
U 084, 0F02,20  ;657            NEXT/IDLE
U 085, 0F02,20  ;658            NEXT/IDLE
U 086, 0F02,20  ;659            NEXT/IDLE
U 087, 0F02,20  ;660            NEXT/IDLE
U 088, 0F02,20  ;661            NEXT/IDLE
U 089, 0F02,20  ;662            NEXT/IDLE
U 08A, 0F02,20  ;663            NEXT/IDLE
U 08B, 0F02,20  ;664            NEXT/IDLE
U 08C, 0F02,20  ;665            NEXT/IDLE
U 08D, 0F02,20  ;666            NEXT/IDLE
U 08E, 0F02,20  ;667            NEXT/IDLE
U 08F, 0F02,20  ;668            NEXT/IDLE
U 090, 0F02,20  ;669            NEXT/IDLE
U 091, 0F02,20  ;670            NEXT/IDLE
U 092, 0F02,20  ;671            NEXT/IDLE
U 093, 0F02,20  ;672            NEXT/IDLE
U 094, 0F02,20  ;673            NEXT/IDLE
U 095, 0F02,20  ;674            NEXT/IDLE
U 096, 0F02,20  ;675            NEXT/IDLE
U 097, 0F02,20  ;676            NEXT/IDLE
U 098, 0F02,20  ;677            NEXT/IDLE
U 099, 0F02,20  ;678            NEXT/IDLE
U 09A, 0F02,20  ;679            NEXT/IDLE
U 09B, 0F02,20  ;680            NEXT/IDLE
U 09C, 0F02,20  ;681            NEXT/IDLE
U 09D, 0F02,20  ;682            NEXT/IDLE
U 09E, 0F02,20  ;683            NEXT/IDLE
U 09F, 0F02,20  ;684            NEXT/IDLE
                ;685
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TW


```
U 0A0, 0F02,20  ;686            NEXT/IDLE
U 0A1, 0F02,20  ;687            NEXT/IDLE
U 0A2, 0F02,20  ;688            NEXT/IDLE
U 0A3, 0F02,20  ;689            NEXT/IDLE
U 0A4, 0F02,20  ;690            NEXT/IDLE
U 0A5, 0F02,20  ;691            NEXT/IDLE
U 0A6, 0F02,20  ;692            NEXT/IDLE
U 0A7, 0F02,20  ;693            NEXT/IDLE
U 0A8, 0F02,20  ;694            NEXT/IDLE
U 0A9, 0F02,20  ;695            NEXT/IDLE
U 0AA, 0F02,20  ;696            NEXT/IDLE
U 0AB, 0F02,20  ;697            NEXT/IDLE
U 0AC, 0F02,20  ;698            NEXT/IDLE
U 0AD, 0F02,20  ;699            NEXT/IDLE
U 0AE, 0F02,20  ;700            NEXT/IDLE
U 0AF, 0F02,20  ;701            NEXT/IDLE
U 0B0, 0F02,20  ;702            NEXT/IDLE
U 0B1, 0F02,20  ;703            NEXT/IDLE
U 0B2, 0F02,20  ;704            NEXT/IDLE
U 0B3, 0F02,20  ;705            NEXT/IDLE
U 0B4, 0F02,20  ;706            NEXT/IDLE
U 0B5, 0F02,20  ;707            NEXT/IDLE
U 0B6, 0F02,20  ;708            NEXT/IDLE
U 0B7, 0F02,20  ;709            NEXT/IDLE
U 0B8, 0F02,20  ;710            NEXT/IDLE
U 0B9, 0F02,20  ;711            NEXT/IDLE
U 0BA, 0F02,20  ;712            NEXT/IDLE
U 0BB, 0F02,20  ;713            NEXT/IDLE
U 0BC, 0F02,20  ;714            NEXT/IDLE
U 0BD, 0F02,20  ;715            NEXT/IDLE
U 0BE, 0F02,20  ;716            NEXT/IDLE
U 0BF, 0F02,20  ;717            NEXT/IDLE
                ;718
```

```
U 0C0, 0F02,20  ;719            NEXT/IDLE
U 0C1, 0F02,20  ;720            NEXT/IDLE
U 0C2, 0F02,20  ;721            NEXT/IDLE
U 0C3, 0F02,20  ;722            NEXT/IDLE
U 0C4, 0F02,20  ;723            NEXT/IDLE
U 0C5, 0F02,20  ;724            NEXT/IDLE
U 0C6, 0F02,20  ;725            NEXT/IDLE
U 0C7, 0F02,20  ;726            NEXT/IDLE
U 0C8, 0F02,20  ;727            NEXT/IDLE
U 0C9, 0F02,20  ;728            NEXT/IDLE
U 0CA, 0F02,20  ;729            NEXT/IDLE
U 0CB, 0F02,20  ;730            NEXT/IDLE
U 0CC, 0F02,20  ;731            NEXT/IDLE
U 0CD, 0F02,20  ;732            NEXT/IDLE
U 0CE, 0F02,20  ;733            NEXT/IDLE
U 0CF, 0F02,20  ;734            NEXT/IDLE
U 0D0, 0F02,20  ;735            NEXT/IDLE
U 0D1, 0F02,20  ;736            NEXT/IDLE
U 0D2, 0F02,20  ;737            NEXT/IDLE
U 0D3, 0F02,20  ;738            NEXT/IDLE
U 0D4, 0F02,20  ;739            NEXT/IDLE
U 0D5, 0F02,20  ;740            NEXT/IDLE
U 0D6, 0F02,20  ;741            NEXT/IDLE
U 0D7, 0F02,20  ;742            NEXT/IDLE
U 0D8, 0F02,20  ;743            NEXT/IDLE
U 0D9, 0F02,20  ;744            NEXT/IDLE
U 0DA, 0F02,20  ;745            NEXT/IDLE
U 0DB, 0F02,20  ;746            NEXT/IDLE
U 0DC, 0F02,20  ;747            NEXT/IDLE
U 0DD, 0F02,20  ;748            NEXT/IDLE
U 0DE, 0F02,20  ;749            NEXT/IDLE
U 0DF, 0F02,20  ;750            NEXT/IDLE
                ;751
```

TW


```
U 0E0, 0F02,20  ;752            NEXT/IDLE
U 0E1, 0F02,20  ;753            NEXT/IDLE
U 0E2, 0F02,20  ;754            NEXT/IDLE
U 0E3, 0F02,20  ;755            NEXT/IDLE
U 0E4, 0F02,20  ;756            NEXT/IDLE
U 0E5, 0F02,20  ;757            NEXT/IDLE
U 0E6, 0F02,20  ;758            NEXT/IDLE
U 0E7, 0F02,20  ;759            NEXT/IDLE
U 0E8, 0F02,20  ;760            NEXT/IDLE
U 0E9, 0F02,20  ;761            NEXT/IDLE
U 0EA, 0F02,20  ;762            NEXT/IDLE
U 0EB, 0F02,20  ;763            NEXT/IDLE
U 0EC, 0F02,20  ;764            NEXT/IDLE
U 0ED, 0F02,20  ;765            NEXT/IDLE
U 0EE, 0F02,20  ;766            NEXT/IDLE
U 0EF, 0F02,20  ;767            NEXT/IDLE
U 0F0, 0F02,20  ;768            NEXT/IDLE
U 0F1, 0F02,20  ;769            NEXT/IDLE
U 0F2, 0F02,20  ;770            NEXT/IDLE
U 0F3, 0F02,20  ;771            NEXT/IDLE
U 0F4, 0F02,20  ;772            NEXT/IDLE
U 0F5, 0F02,20  ;773            NEXT/IDLE
U 0F6, 0F02,20  ;774            NEXT/IDLE
U 0F7, 0F02,20  ;775            NEXT/IDLE
U 0F8, 0F02,20  ;776            NEXT/IDLE
U 0F9, 0F02,20  ;777            NEXT/IDLE
U 0FA, 0F02,20  ;778            NEXT/IDLE
U 0FB, 0F02,20  ;779            NEXT/IDLE
U 0FC, 0F02,20  ;780            NEXT/IDLE
U 0FD, 0F02,20  ;781            NEXT/IDLE
U 0FE, 0F02,20  ;782            NEXT/IDLE
U 0FF, 0F02,20  ;783            NEXT/IDLE
                ;784
```

;785

TW

```
        DDP.DATO.10             460     468     475 #   480     484     496     500
        DDP.DATO.20             212     491     511 #   527
        DDP.DATO.25             515     523     529 #
        DDP.DATO.30             533 #   536     540
        IDLE                    214 #   260     303     358     412     463     518     573     628     648 #   653 #   654
                                655     656     657     658     659     660     661     662     663 #   664 #   665     666
                                667     668     669     670     671     672     673     674 #   675 #   676     677     678
                                679     680     681     682     683     684     686 #   687 #   688     689     690     691
                                692     693     694     695     696     697 #   698 #   699     700     701     702     703
                                704     705     706     707     708 #   709 #   710     711     712     713     714     715
                                716     717     719     720 #   721 #   722     723     724     725     726     727     728
                                729     730     731 #   732 #   733     734     735     736     737     738     739     740
                                741     742 #   743 #   744     745     746     747     748     749     750     752     753
                                754 #   755 #   756     757     758     759     760     761     762     763     764     765 #
                                766 #   767     768     769     770     771     772     773     774     775     776 #   777 #
                                778     779     780     781     782     783
        MAIN.20                 158     219 #
        MAIN.LOOP               139 #   216     445     550     558
        PURGE                   204     208     622 #
        PURGE.10                625     631 #   639
        PURGE.20                635     642 #   645
PRTC                            60 #
        CPU.RD                  66 #    189     266     270     276     281     286
        CPU.WRT                 65 #    182     235     239     245     251     255     289
        DATI                    61 #    166     372     376     389     393     400     427     431     439 #   449 #   588
                                592     603     607     614
        DATO                    64 #    298     306     317     321     334     338     458     466     479 #   483 #   495
                                499     513     521     531     535     539     633     644
        PURGE.ADDR              63 #    624     638
        UB.ADDR                 62 #    162     176     195     199     211     225     311     366     421 #   471 #   490
                                526     581     599
SSYN                            78 #
        ASSERT                  79 #    229     346     400     439     450     506     546     553     615 #
UA.CTRL                         68 #
        HI-Z                    70 #    184     190     259     624     633     638
        RCV                     72 #
        RCV.INCR                71 #    162     172     211     328     408     416     421     427     431 #   490 #   514
                                522     526     599
        XMIT                    69 #    235     239     245     251     255     266     270     276     281 #   286 #   290

UBDATA                          81 #
        DRIVE.UD                83 #    235     239     400     439     449     614
        DRIVE.UD.NOPB           84 #    245     251     255
        HI-Z                    85 #    162     167     176     183     199     290     366     372     376 #   384 #   389
                                393     407     415     421     427     431     581     588     592 #   599 #   603     607

        RCV                     82 #
```

TW


```
CMI.STAT?                       120 #   298     306     317     321     334     338     353     361     372 #   376 #   389
                                393     407     415     427     431     459     467     479     483 #   495 #   499     531
                                535     539     568     576     588     592     603     607 #   644 #
DP_CMI                          128 #   372     376     389     393     427     431
DP_CMI.W                        129 #   588     592     603     607
EMPTY?                          118 #   203     207
FIRST.FORK?                     119 #   216     445     550     558
HOLD.80                         135 #   407     415
INCR                            125 #   162     172     328     408     416     421     427     431     514 #   522 #   599
MSYN                            124 #   250     282     286
REQ                             126 #   167     372     376     384     390     394     401     428     432 #   440 #   451
                                480     484     588     592     604     608     616
REQ.PUR?                        117 #   624     638
REQ.RD?                         116 #   162     176     199     366     421     581     599
REQ.WRT?                        115 #   195     225     311     471
REQ.XTRA?                       134 #   211     490     526
SSYN                            123 #   229     346     400     439     450     506     546     553     615 #
UB.RD_DP                        133 #   400     439     449     614
UB.STAT?                        121 #   185     191     240     250     271     282     450     553     561 #
UB_CMI.ADDR                     132 #   266     270     276     281     286
UB_CMI.WRT                      130 #   235     239
UB_CMI.WRT.NOPB                 131 #   245     251     255
```

U 000	143#	148#	153#	158#	163#	168#	173#	177#
U 008	186#	192#	196#	200#	204#	208#	212#	216#
U 010	236#	241#	221#	226#	267#	272#	245	229#
U 018	318#	322#	325#	330#	335#	339#	342#	346#
U 020	373#	377#	380#	385#	390#	394#	397#	401#
U 028	260	276	252#	255#	428#	432#	435#	440#
U 030	480#	484#	487#	491#	496#	500#	503#	506#
U 038	291		283#	286#	536#	540#	543#	546#
U 040	589#	593#	596#	600#	604#	608#	611#	616#
U 048	300#	303#	308#	312#		645#		648#
U 050	355#	358#	363#	367#	409#	412#	417#	422#
U 058			445#	451#	460#	463#	468#	472#
U 060	515#	518#	523#	527#				531#
U 068			550#	554#			558#	561#
U 070	570#	573#	578#	582#			625#	628#
U 078			635#	639#				
U 080	653	654	655	656	657	658	659	660
U 088	661	662	663	664	665	666	667	668
U 090	669	670	671	672	673	674	675	676
U 098	677	678	679	680	681	682	683	684
U 0A0	686	687	688	689	690	691	692	693
U 0A8	694	695	696	697	698	699	700	701
U 0B0	702	703	704	705	706	707	708	709
U 0B8	710	711	712	713	714	715	716	717
U 0C0	719	720	721	722	723	724	725	726
U 0C8	727	728	729	730	731	732	733	734
U 0D0	735	736	737	738	739	740	741	742
U 0D8	743	744	745	746	747	748	749	750
U 0E0	752	753	754	755	756	757	758	759
U 0E8	760	761	762	763	764	765	766	767
U 0F0	768	769	770	771	772	773	774	775
U 0F8	776	777	778	779	780	781	782	783

TW

Memory	No. Microwords	High Addr
U	236	255

Total number of microwords used: 236
Highest address(decimal): 255
Pass 1 warnings detected: 0 Pass 2 warnings detected: 0
Pass 1 errors detected: 0 Pass 2 errors detected: 0

LINE	ITEM	TOP DOCUMENT	PART NUMBER	MIN REV	DESCRIPTION	QTY PER VARIATION YA	YB	YC	REFERENCE DESIGNATOR
					VARIATION REVISION LEVEL:				
1	42		5015549-00		DRILL AND ETCH	1	1	1	
2	1		1013466-22		.1 MFD 50V +80-20% Z5U CER	61	-	-	C7-C30,C32-C35,C37-C40,C42-C54,
								CONT	C57,C59-C63,C66-C75
			CONT			-	69	69	C7-C75
3	44		1017472-00		10 MFD 35V +75-10% AL EL	6	6	6	C1-C6
4	43		1216988-02		HANDLE,MODULE,HEX TWO EJECTORS	1	1	1	
5	37		1300247-00		120.0 .25 W 5.0 % CF	1	1	1	R46
6	34		1300309-00		390.0 .25 W 5.0 % CF	10	-	-	R23,R25,R27,R29,R31,R33,R35,R37,
								CONT	R39,R41
			CONT			-	20	-	R23,R25,R27,R29,R31,R33,R35,R37,
								CONT	R39,R41,R3,R5,R7,R9,R11,R13,R15,
								CONT	R17,R19,R21
			CONT			-	-	30	R23,R25,R27,R29,R31,R33,R35,R37,
								CONT	R39,R41,R3,R5,R7,R9,R11,R13,R15,
								CONT	R17,R19,R21,R51,R53,R55,R57,R59,
								CONT	R61,R63,R65,R67,R69
7	32		1300316-00		470.0 .25 W 5.0 % CF	5	5	5	R1,R43,R45,R47,R70
8	36		1301424-00		680.0 .25 W 5.0 % CF	1	1	1	R44
9	33		1301972-00		270.0 .25 W 5.0 % CF	10	-	-	R22,R24,R26,R28,R30,R32,R34,R36,
								CONT	R38,R40
			CONT			-	20	-	R22,R24,R26,R28,R30,R32,R34,R36,
								CONT	R38,R40,R2,R4,R6,R8,R10,R12,R14,
								CONT	R16,R18,R20
			CONT			-	-	30	R22,R24,R26,R28,R30,R32,R34,R36,
								CONT	R38,R40,R2,R4,R6,R8,R10,R12,R14,
								CONT	R16,R18,R20,R50,R52,R54,R56,R58,
								CONT	R60,R62,R64,R66,R68
10	38		1302379-00		75.0 .25 W 5.0 % CF	2	2	2	R48,R49
11	35		1311522-00		200.0 .25 W 5.0 % CF	1	1	1	R42
12	40		1503121-00		2N 2369 NPN 350MW SI N	1	1	1	Q1

REVISION HISTORY			BASIC PART NO: L0008				
ENG	ECO NUMBER	REV	SECTION A OF A	DRN: R.LOVE	DATE: 15-NOV-82	DIGITAL	
---	INITIAL	A	SECTION.VARIATION INDEX	CHK'D: F.GERRY	DATE: 15-NOV-82	TITLE PARTS LIST	
SF	L0008-TW002	B	[A] YA,YB,YC			PCS 750	
SF	L0008-TW004	C	[B]				
			[C]	DES.ENG: J.STARK	DATE: 15-NOV-82	DOCUMENT NUMBER	
			[D]			SIZE / CODE / NUMBER / REV	
			[E]				
			[F]	RESP.ENG.: J.STARK	DATE: 15-NOV-82	K / PL / L0008-0-DBP / C	
			[H]				
			[J]				
			[K]	MFG.ENG.: B.NEUMANN	DATE: 15-NOV-82	RELEASE DATE: 04-JAN-85	
			[L]				
			[M]	ASSEMBLY NUMBER:	TOP DOCUMENT NUMBER:	FILE NAME:	EDIT #
			[N]	E-UA-L0008-0-0	B-DD-L0008-0-0	Z3928C.PLS	21

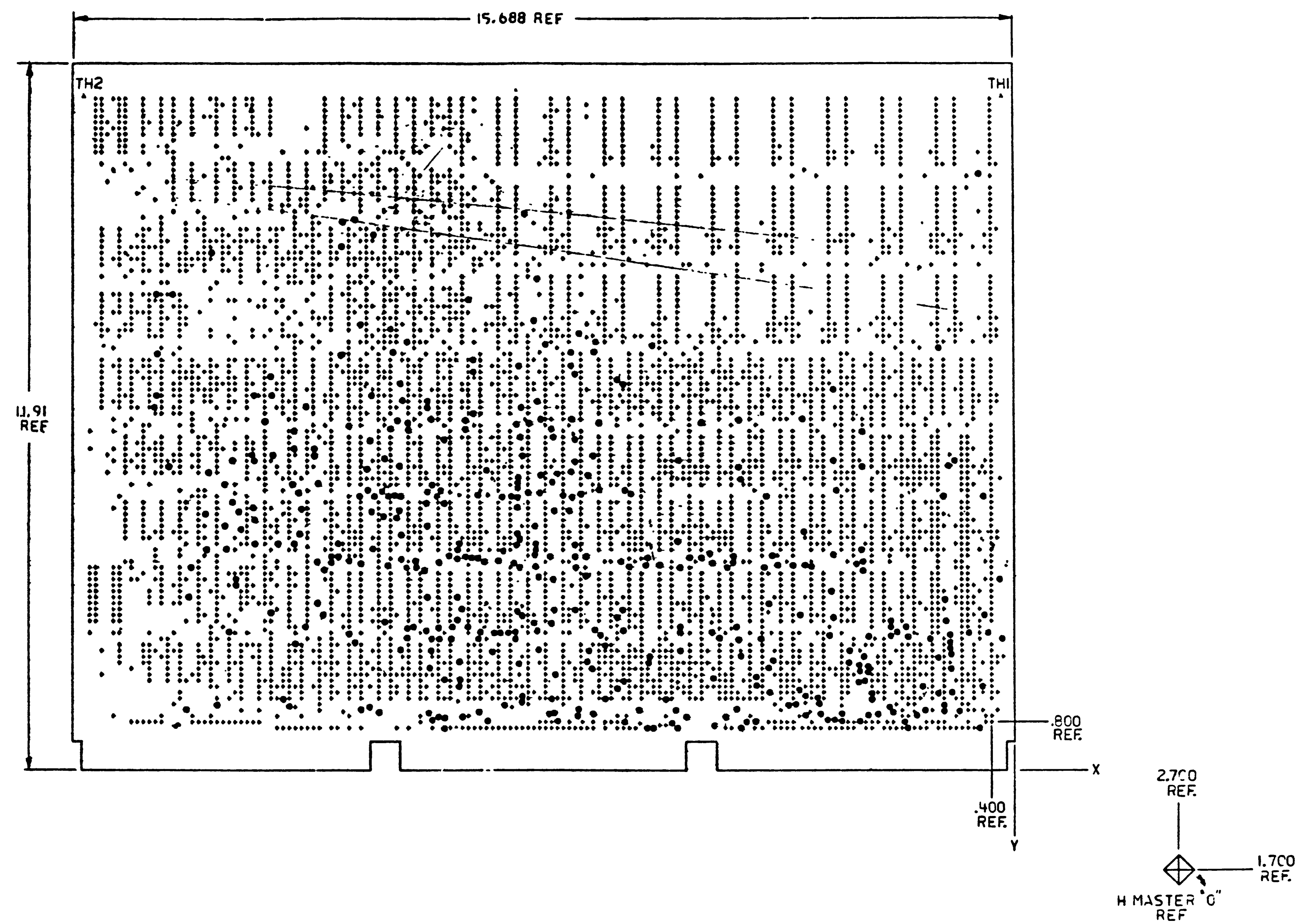
LINE	ITEM	TOP DOCUMENT	PART NUMBER	MIN REV	DESCRIPTION	QTY PER VARIATION YA	YB	YC	REFERENCE DESIGNATOR
					VARIATION REVISION LEVEL:				
13	18		1811660-01		OSCILLATOR, XTAL 10.000 MHZ	1	1	1	E159
14	41		1811660-29		OSCILLATOR, XTAL 18.750 MHZ	1	1	1	E168
15	13		1910532-00		74S00 NAND GATE-QUAD 2IN	2	2	2	E148,E171
16	23		1910533-00		74S03 NAND GATE-QUAD 2IN,O	2	2	2	E175,E186
17	10		1910534-00		74S04 INVERTER GATE-HEX 1I	5	5	5	E139,E147,E162,E172,E190
18	20		1910536-00		74S10 NAND GATE-TRIPLE 3IN	2	2	2	E161,E170
19	27		1910544-00		74S74 FF-D DUAL,EDGE TRIGG	3	3	3	E181,E183,E188
20	29		1910546-00		74S140 NAND GATE-DUAL 4INPU	1	1	1	E187
21	19		1910547-00		74S153 MUX 1 OF 4 (DUAL)	6	6	6	E160,E167,E174,E176,E177,E191
22	14		1910549-00		74S158 MUX 1 OF 2 (QUAD)	6	6	6	E149,E156,E165,E166,E169,E185
23	22		1911573-00		74S280 PARITY GEN/CHKR,9BIT	1	1	1	E164
24	6		1911675-00		/4S138 DECODER/DEMUX 3-8 LI	3	3	-	E119,E129,E130
			CONT			-	-	4	E119,E129,E130,E138
25	25		1911712-00		74S51 AND-OR GATE-INVERT D	1	1	1	E179
26	31		1911983-00		74S133 NAND GATE-POSITIVE 1	1	1	1	E195
27	11		1912388-00		74S02 NOR GATE-QUAD 2IN,PO	1	1	1	E140
28	24		1912389-00		74S08 AND GATE-QUAD 2IN,PO	2	2	2	E178,E192
29	7		1912746-00	DEC	74S37 NAND GATE-QUAD 2IN	3	3	3	E120,E121,E122
30	26		1912803-00		LS04 INVERTER GATE,HEX	1	1	1	E180
31	16		1912830-00		LS90 COUNTER,ASYNCH UP,DE	1	1	1	E152
32	8		1912872-00		LS377 FF-D 8BIT W/ENABLE	2	2	2	E128,E137
33	17		1913340-00		74S32 OR GATE-QUAD 2IN	1	1	1	E153
34	15		1913462-00		74S240 OCTAL BUFFER,INVERTI	1	1	1	E151
35	2		1913493-00		74S241 OCTAL BUFFER,TRI-STA	12	-	-	E1,E8,E28,E41,E54,E88,E101,E114,
								CONT	E132,E150,E155,E184
			CONT			-	22	22	E1,E6,E8,E16,E28,E33,E41,E46,
								CONT	E54,E59,E88,E93,E101,E109,E114,
								CONT	E123,E132,E141,E150,E155,E157,
								CONT	E184
36	21		1913671-00		74S374 FF-D,OCTAL,TR1 STATE	2	2	2	E163,E173
37	28		1914085-00		74S260 NOR GATE-DUAL,POS	2	2	2	E182,E196
38	12		1914868-00		FF-D QUAD, COMMON R	1	1	1	E146
39	9		1915193-00		LS244 DRIVER,LINE,OCTAL,TR	1	1	1	E131
40	3		1915218-00		LS245 TRANSCEIVER,BUS,OCTA	15	-	-	E2,E12,E24,E37,E50,E63,E67,E72,
								CONT	E76,E80,E92,E105,E118,E136,E154
			CONT			-	27	27	E2,E7,E12,E20,E24,E32,E37,E45,
								CONT	E50,E58,E63,E67,E71,E72,E76,E80,
								CONT	E84,E92,E97,E105,E113,E118,E127,
								CONT	E136,E145,E154,E158
41	30		2114523-00		4K MOS RAM 55NS 18PIN	2	2	2	E189,E194
42	5		2116957-03		1K MOS RAM 55NS 1	20	-	-	E11,E19,E23,E31,E36,E44,E49,E57,
								CONT	E62,E70,E75,E83,E91,E96,E104,
								CONT	E112,E117,E126,E135,E144
			CONT			-	40	-	E11,E19,E23,E31,E36,E44,E49,E57,
								CONT	E62,E70,E75,E83,E91,E96,E104,
								CONT	E112,E117,E126,E135,E144,E9,E17,
								CONT	E21,E29,E34,E42,E47,E55,E60,E68,
								CONT	E73,E81,E89,E94,E102,E110,E115,

DIGITAL	TITLE	SECTION	SIZE	CODE	DOCUMENT NUMBER	REV
	PCS 750	A OF A	K	PL	L0008-0-DBP	C

LINE	ITEM	TOP DOCUMENT	PART NUMBER	MIN REV	DESCRIPTION	QTY PER YA	VARIATION YB	VARIATION YC	REFERENCE DESIGNATOR
					VARIATION REVISION LEVEL:				
								CONT	E124,E133,E142
			CONT			-	-	60	E9,E10,E11,E17,E18,E19,E21,E22,
								CONT	E23,E29,E30,E31,E34,E35,E36,E42,
								CONT	E43,E44,E47,E48,E49,E55,E56,E57,
								CONT	E60,E61,E62,E68,E69,E70,E73,E74,
								CONT	E75,E81,E82,E83,E89,E90,E91,E94,
								CONT	E95,E96,E102,E103,E104,E110,
								CONT	E111,E112,E115,E116,E117,E124,
								CONT	E125,E126,E133,E134,E135,E142,
								CONT	E143,E144
43	4	BLANK			*** THIS ITEM IS NOT USED ***	-	-		
44	45		23090F4-00		F4-01	1	1	1	E3
45	46		23091F4-00		F4-01	1	1	1	E4
46	47		23092F4-00		F4-01	1	1	1	E5
47	48		23093F4-00		F4-01	1	1	1	E13
48	49		23094F4-00		F4-01	1	1	1	E14
49	50		23095F4-00		F4-01	1	1	1	E15
50	51		23096F4-00		F4-01	1	1	1	E25
51	52		23097F4-00		F4-01	1	1	1	E26
52	53		23098F4-00		F4-01	1	1	1	E27
53	54		23099F4-00		F4-01	1	1	1	E38
54	55		23100F1-00		F1-01	1	1	1	E39
55	56		23101F4-00		F4-01	1	1	1	E40
56	57		23102F4-00		F4-01	1	1	1	E51
57	58		23103F4-00		F4-01	1	1	1	E52
58	59		23104F4-00		F4-01	1	1	1	E53
59	60		23105F4-00		F4-01	1	1	1	E64
60	61		23106F4-00		F4-01	1	1	1	E65
61	62		23107F4-00		F4-01	1	1	1	E66
62	63		23108F4-00		F4-01	1	1	1	E77
63	64		23109F4-00		F4-01	1	1	1	E78
64	65		23110F4-00		F4-01	1	1	1	E79
65	66		23111F4-00		F4-01	1	1	1	E85
66	67		23112F4-00		F4-01	1	1	1	E86
67	68		23113F4-00		F4-01	1	1	1	E87
68	69		23114F4-00		F4-01	1	1	1	E98
69	70		23115F4-00		F4-01	1	1	1	E99
70	71		23116F4-00		F4-01	1	1	1	E100
71	72		23117F4-00		F4-01	1	1	1	E106
72	73		23118F4-00		F4-01	1	1	1	E107
73	74		23119F4-00		F4-01	1	1	1	E108
74	39		9009185-00		JUMPER, WIRE, INSULATED, BLACK B	2	-	-	W1,W3
			CONT			-	2	-	W2,W4
			CONT			-	-	1	W4
75	75		9000024-01		EYELET,ROLLED 0.1210DX0.192	12	12	12	
76	76		9105740-55		WIRE(WRAP) 30AWG KYNAR UL14	A/R	A/R	A/R	

DIGITAL	TITLE	SECTION	SIZE	CODE	DOCUMENT NUMBER	REV
	PCS 750	A OF A	K	PL	L0008-0-DBP	C

VIEWED FROM SIDE 1
COMPONENT SIDE



FOR HOLE TOLERANCES USE DEC STD 176										
SYMBOL	+	⅄	X	♦	Z	M	Δ	◘	●	✱
FIN HOLE SIZE	.038	.157								
PLATED	X									
NON PLATED		X								
QTY.	6132	2								
◯=OFF GRD HOLE	416	0								
DRILL SIZE										

NOTE: ALL HOLE LOCATIONS ARE DESIGNED ON .025 GRID INCREMENTS FROM DATUM UNLESS SYMBOL IS CIRCLED.

DESIGN INFORMATION

CIRCUIT SIZE: X 15.688 Y 11.910 INCHES
CIRCUIT TYPE: PPE() PTH() ML(X)
CIRCUIT H015X15()
TECHNOLOGY: S0() H012X13() H20(X) OTHER() ______
FINGER CONNECTOR DIM. PER D-MD-ELEN604-0-1 () AS SHOWN()
LAYER CONSTRUCTION PER C-MD-ELEN630-0-4 () AS SHOWN()
ARTWORK LAYOUT: MANUAL() CAD(X)
ENG SPECIAL FEATURES: SIDE1 109
SPECIAL NOTES:
1. BOARD UL RATING IS 94V0
2. INCIRCUIT THIEVING APPROVED BUT NOT SHOWN.
3. INCIRCUIT THIEVING VOIDS.

FABRICATION INFORMATION

FABRICATE BOARD PER D-MD-ELMF658-0-0 (X) AS SHOWN()
SOLDER MASK, SIDE 1(X) SIDE 2(X) NONE()
SPECIFICATIONS AND STANDARDS:
MATERIALS AND WORKMANSHIP FOR ALL FABRICATED PRINTED WIRING BOARDS MUST MEET OR EXCEED THE REQUIREMENTS OF DEC STD 176.
SPECIAL NOTES:

TOLERANCES
INCHES UNLESS SPECIFIED
.XXX ± .005 ANGLES
.XX ± .010 ±0 DEG 30 MIN
.X ± .020

SIGNATURES	DATE
DRN: [signature]	11-9-82
CHK D: E.T. GERRY	11-10-82
MECH ENG: [signature]	
PROJ ENG: [signature]	
MFG ENG: [signature]	
SCALE: 1/1	
SHEET 1 OF 7	
NEXT HIGHER ASSY: E-UA-L0008-0-0	

digital

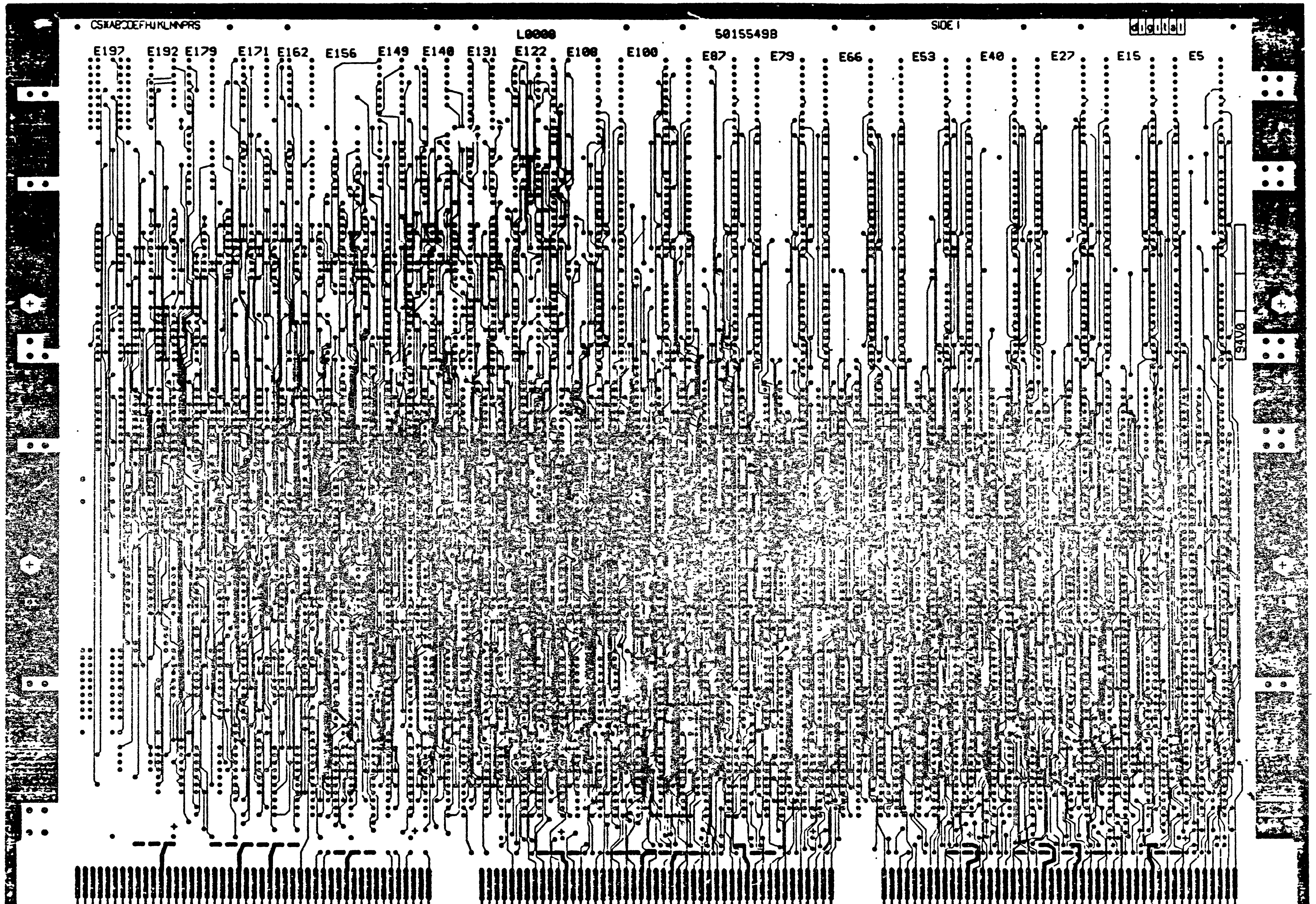
TITLE: DRILL & ETCH DRAWING

SIZE	CODE	NUMBER	REV
D	MD	5015549-0-0	B

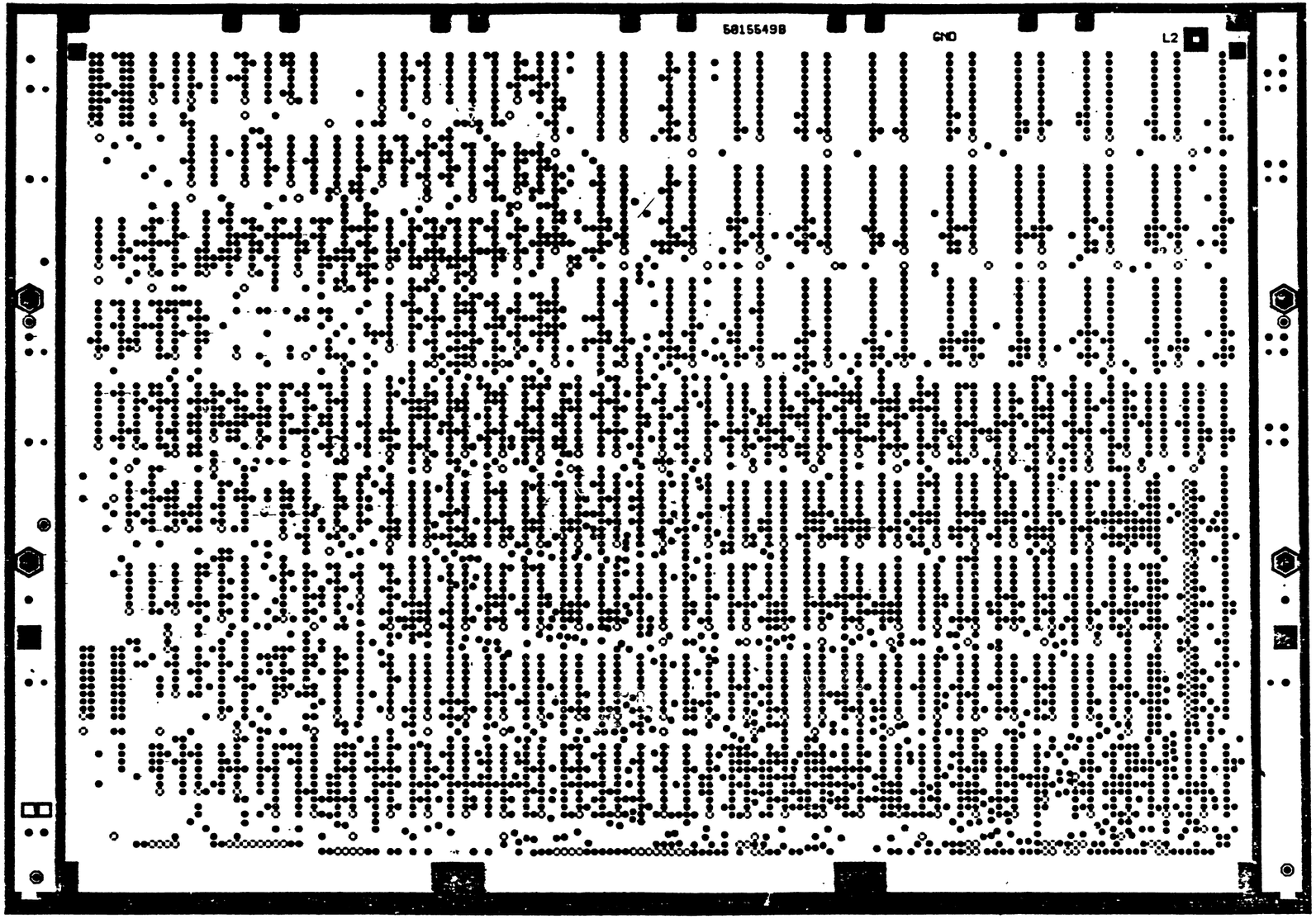
ETCH REV: B

CHG	CHANGE NO	REV
	L0008-TW1	B

A. KURCEVE 11-16-82
S. FOOTE



TITLE			
DRILL & ETCH DRAWING	E	MP 5015549-0-0	B

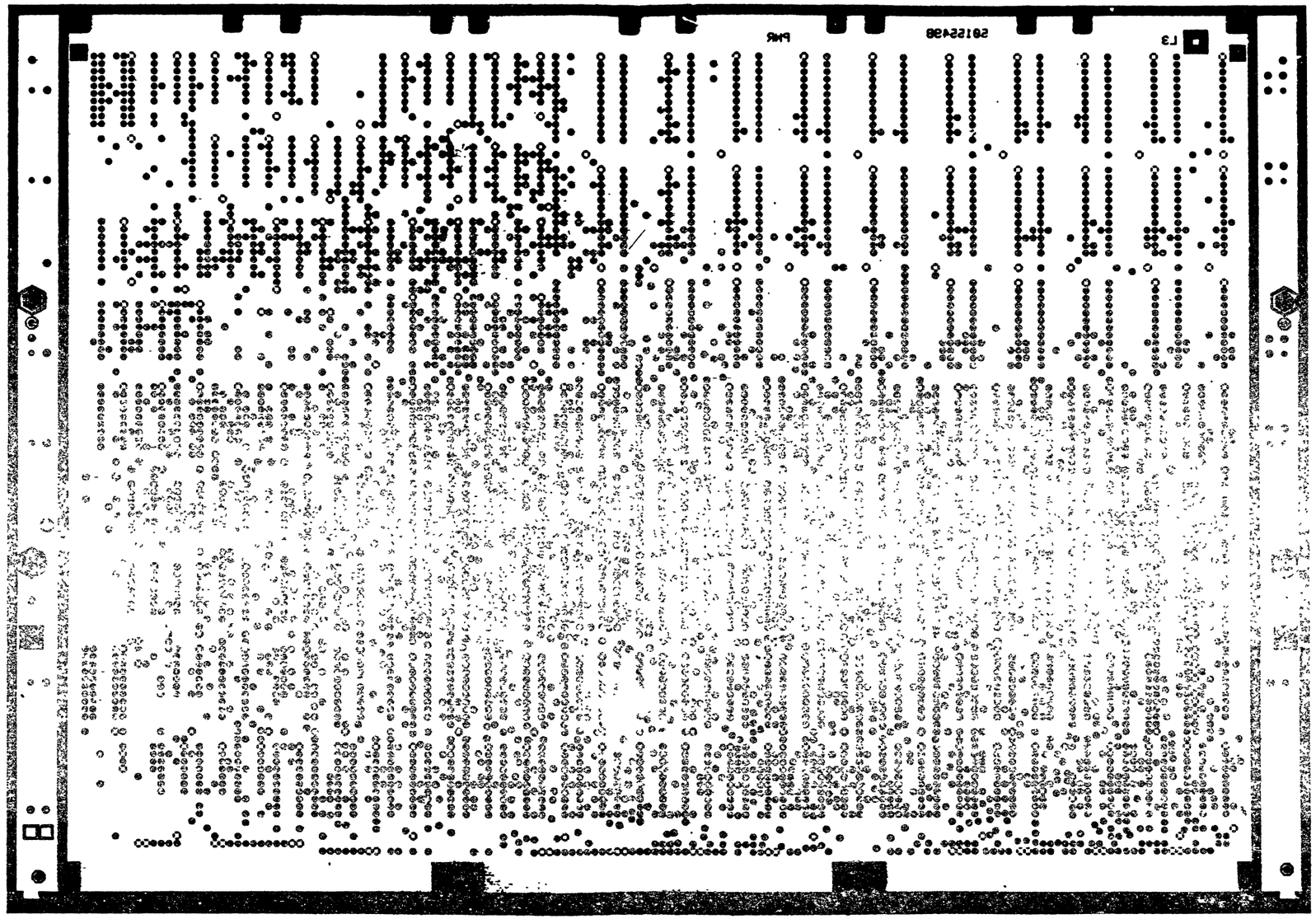


REVISION HISTORY		
DATE	ECO NUMBER	REV

TITLE: DRILL & ETCH DRAWING

DOCUMENT NUMBER: EXILE 58155498-0-C B

SHEET 1 OF 3



REVISION HISTORY		
DATE	ECO NUMBER	REV

TITLE: DRILL & ETCH DRAWING

DOCUMENT NUMBER: EMD 5015549-0-0 B

SCALE: 1:1 SHEET 4 OF 4

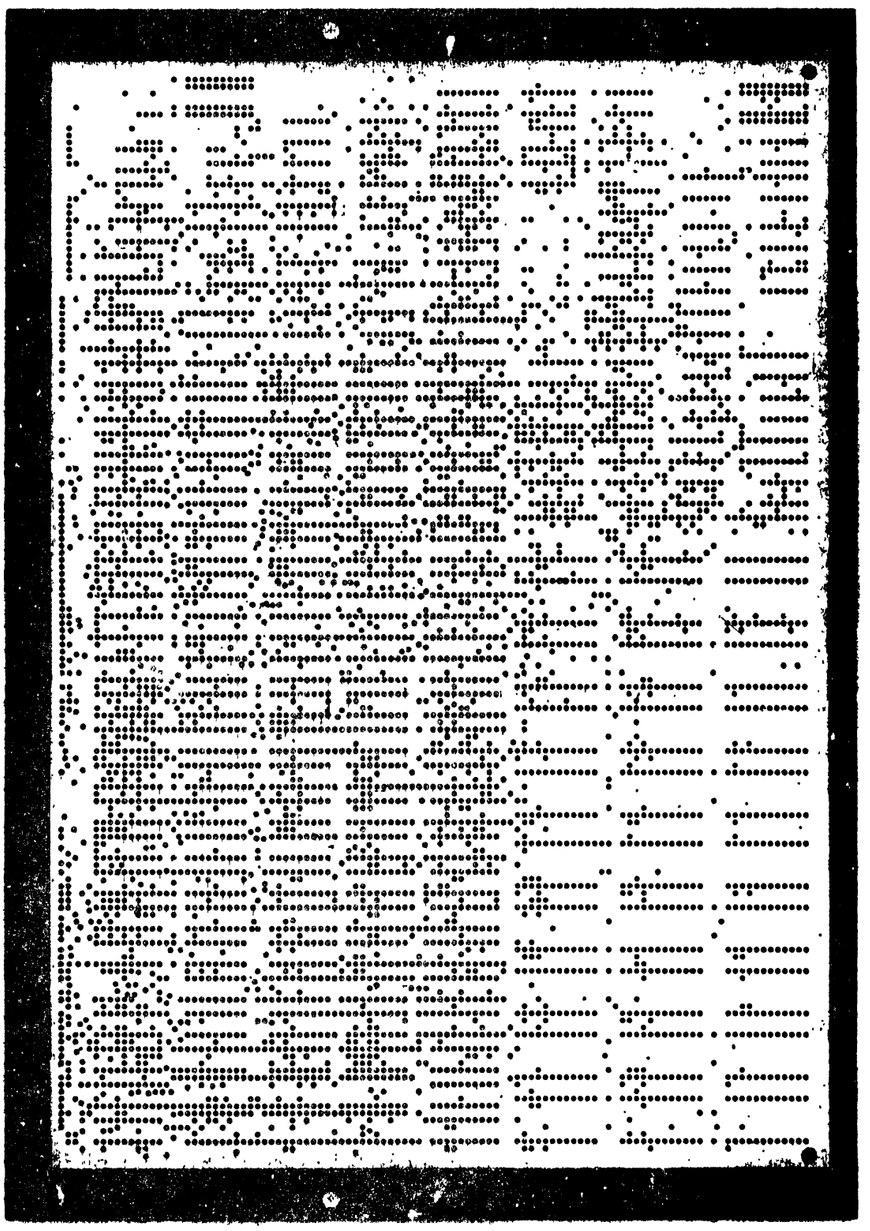
5015549-0-0 B

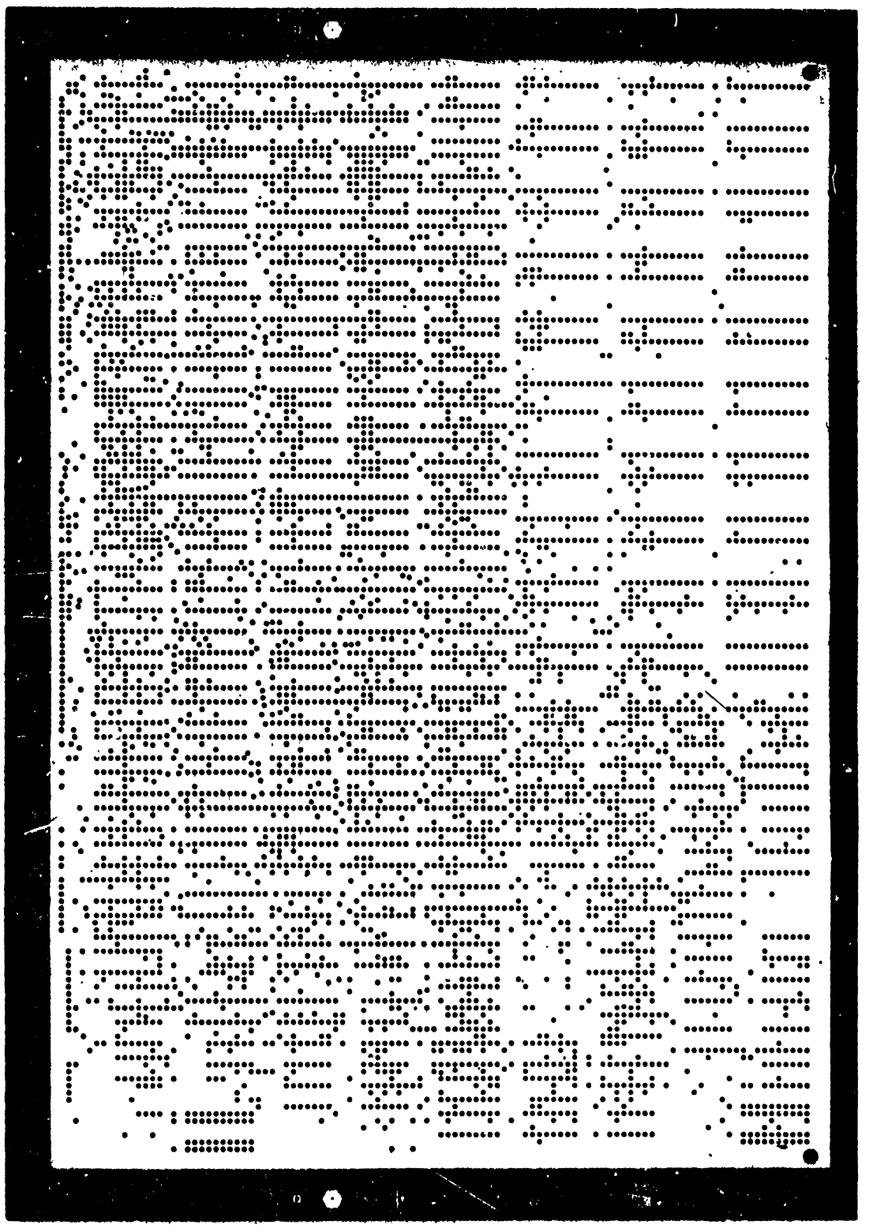
REVISION HISTORY		
DATE	ECO NUMBER	REV

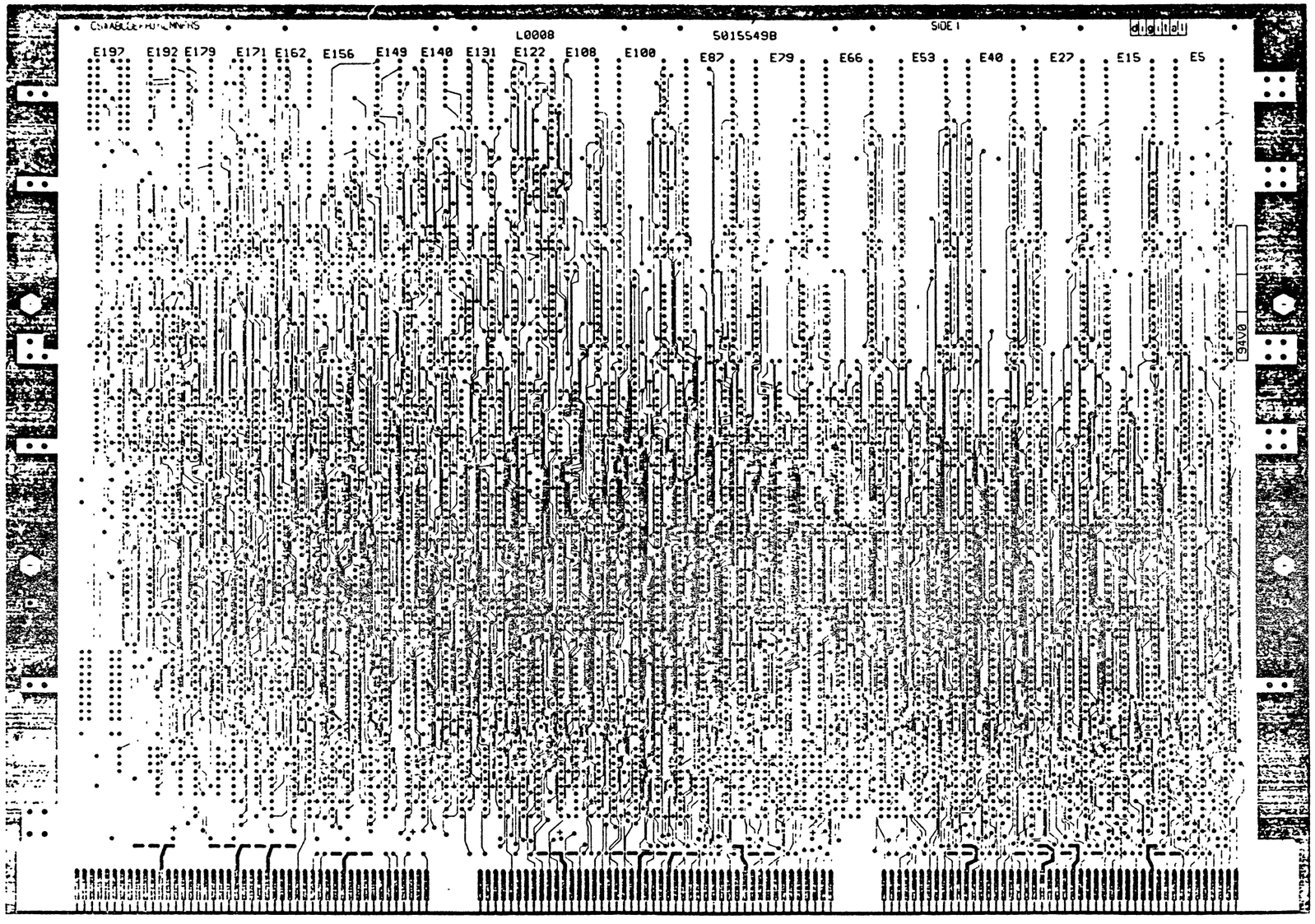
TITLE: DRILL&ETCH DRAWING

DOCUMENT NUMBER: EMD 5015549-0-0 B

SHEET 5 OF 7






L0008
5015549B
SIDE 1
E197
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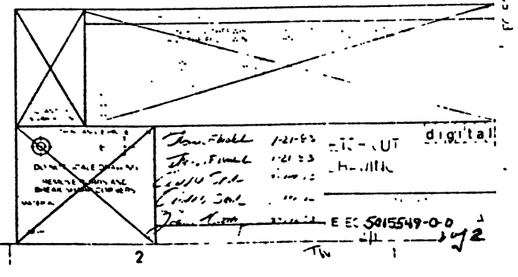
digital

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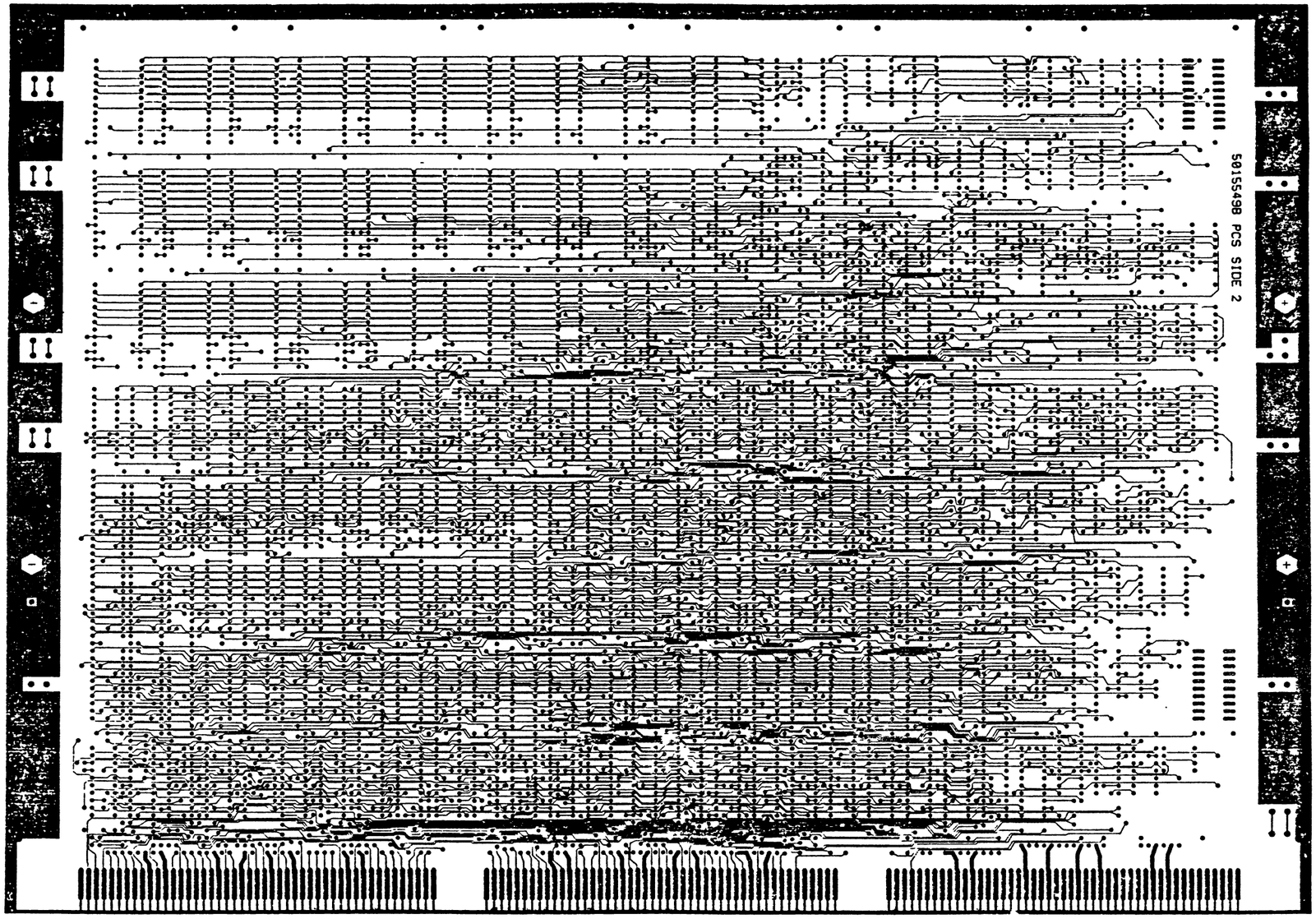
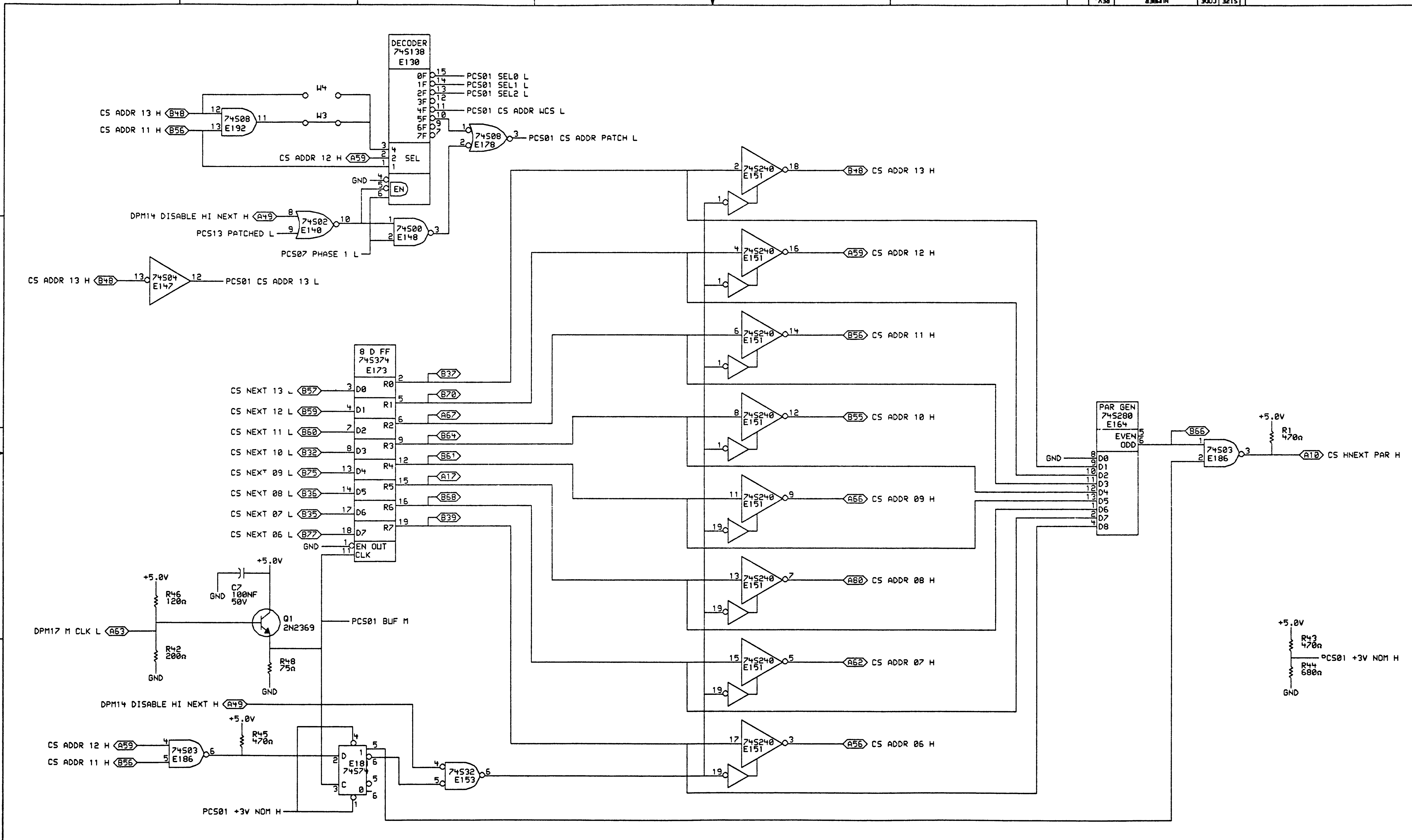


ETCH CUT DRAWING

E- 5015549-0D

2 of 2



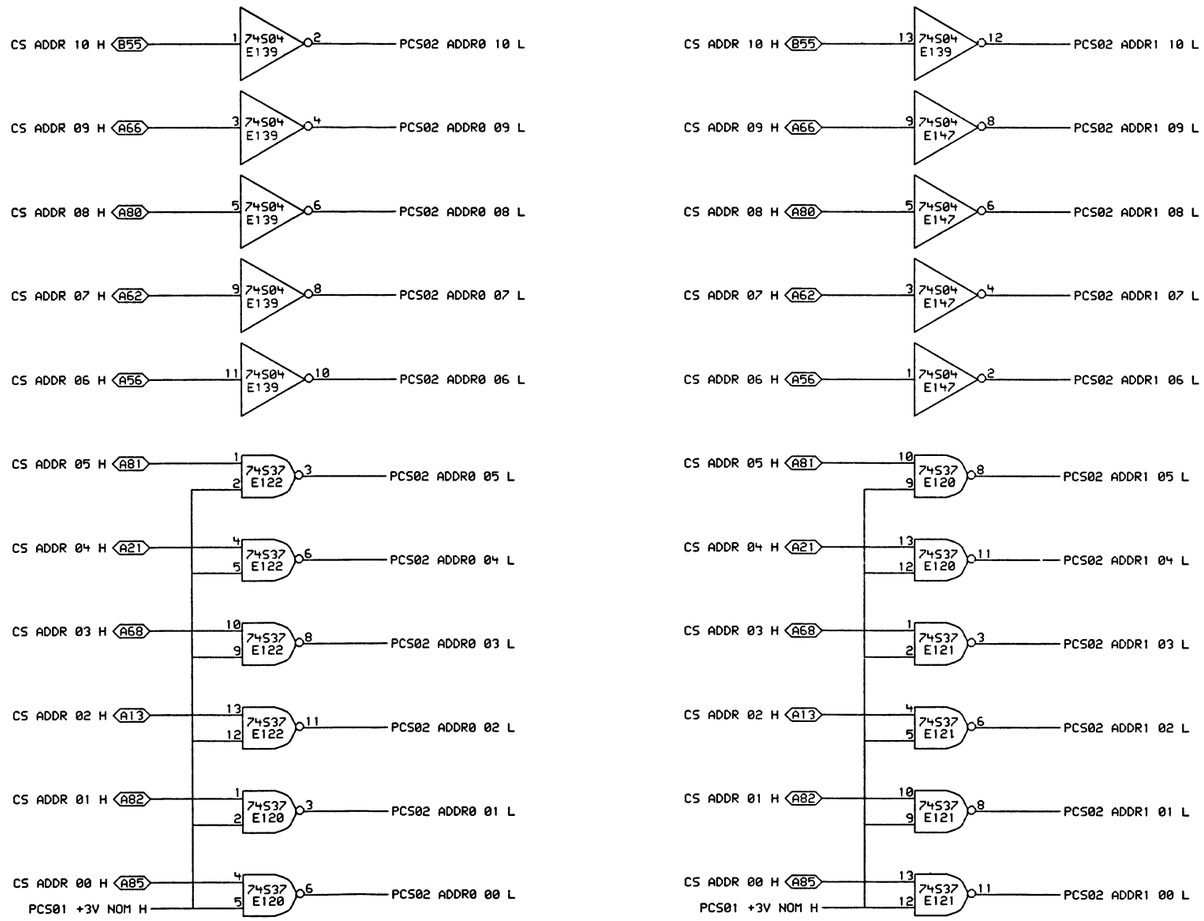
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. DATE 02-FEB-83 | ENG. DATE | CHK'D. DATE
DSKE:<STARK>PCS01.DRW 17-JAN-83 10:29
BOARD LOCATION:
SHEET 1 OF 1
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS01 CS ADDR DECODE

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-01	A



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. T. Goodby — DATE 02-FEB-83 — ENG. — DATE

CHK'D. — DATE — BOARD LOCATION:

SHEET 1 OF 1

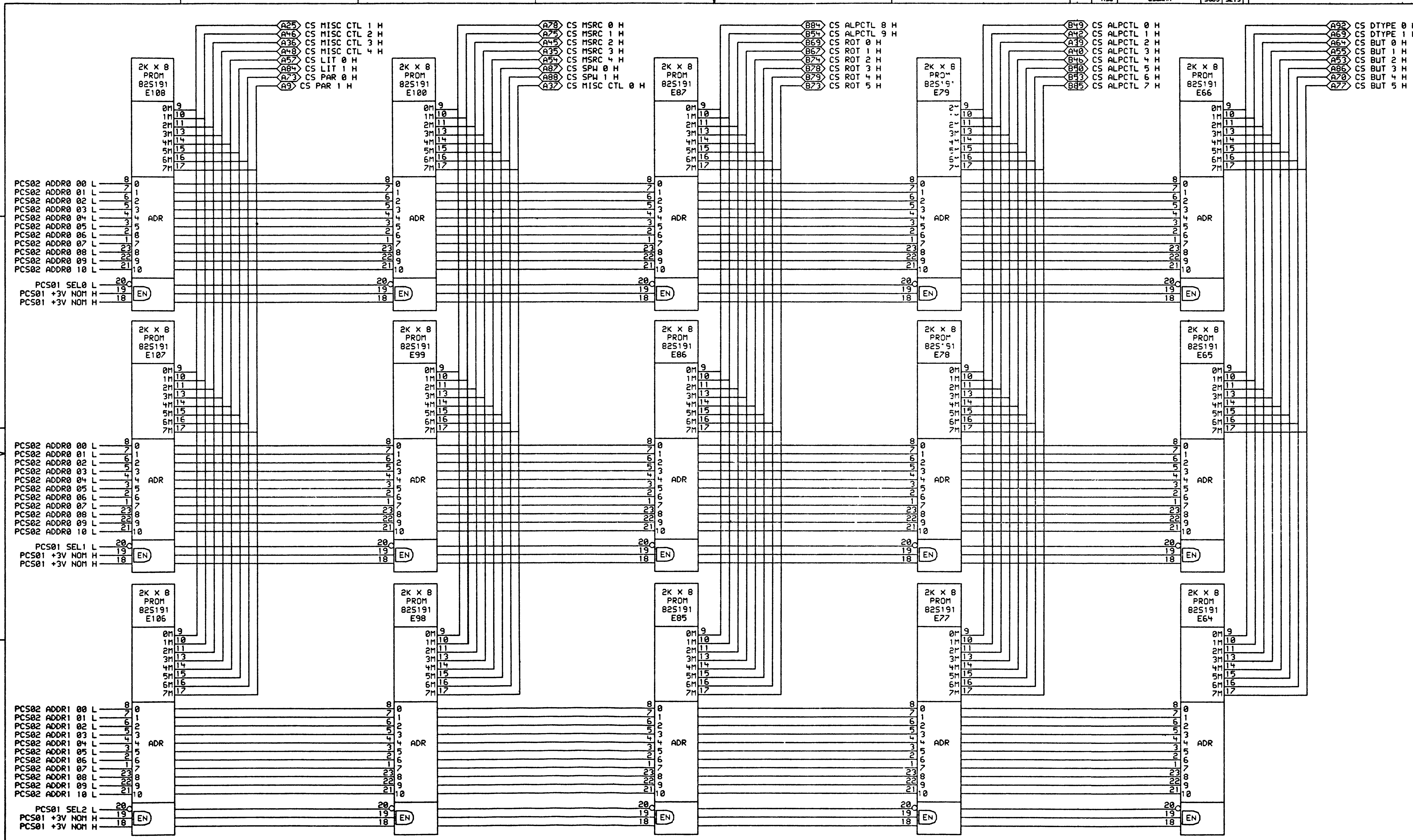
DSKE:<S*ARK>*CS02.DRW 17-JAN-83 10:30 — NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION-MODEL:

TITLE: PCS02 ADDRESS BUFFERS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-02	A

TW

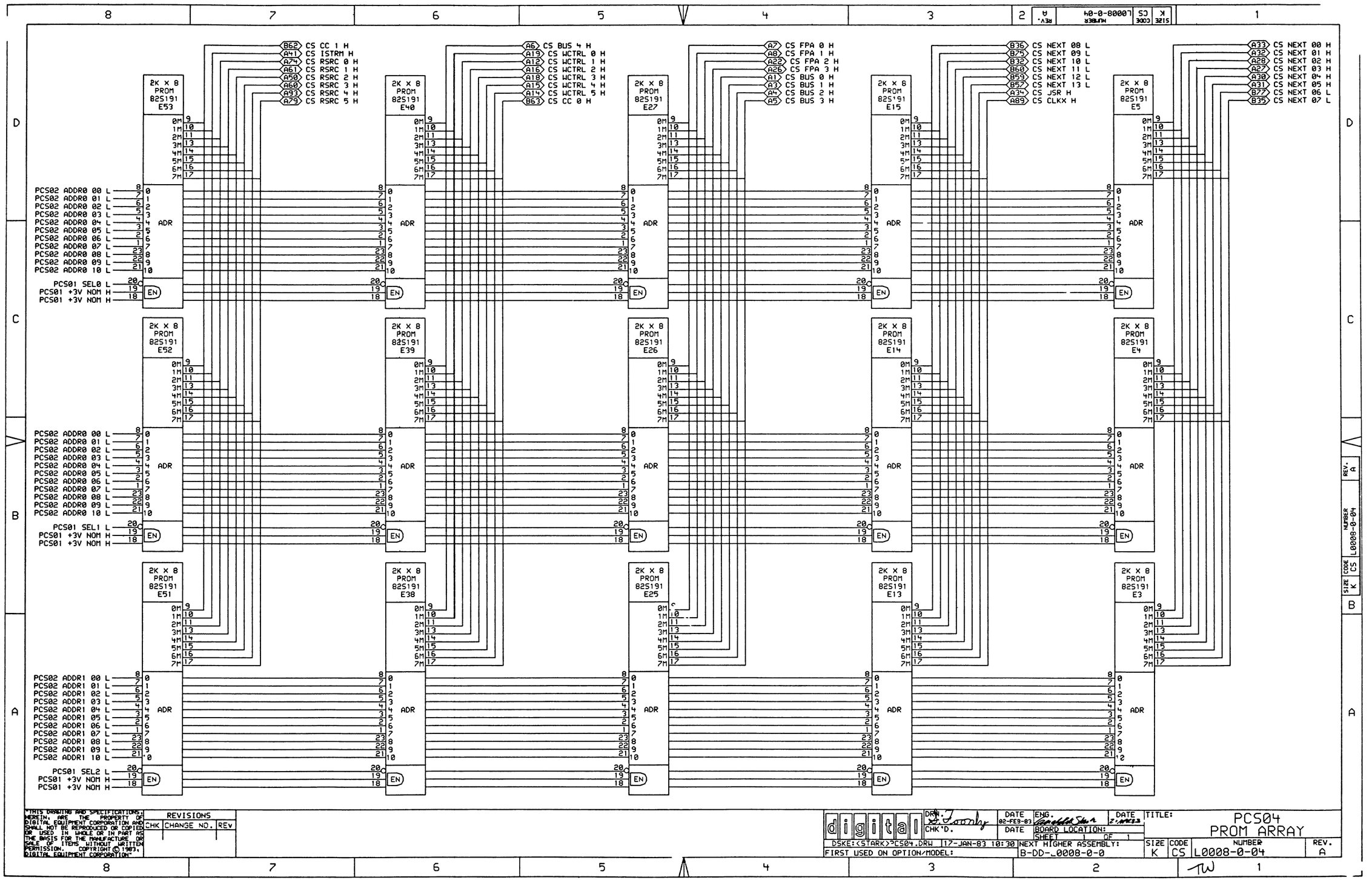


REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. | DATE 02-FEB-83 | ENG. | DATE | TITLE: PCS03 PROM ARRAY
CHK'D. | DATE | BOARD LOCATION: | SHEET 1 OF 1
DSKE:<STARK>PCS03.DRW 17-JAN-83 10:30
FIRST USED ON OPTION/MODEL: | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

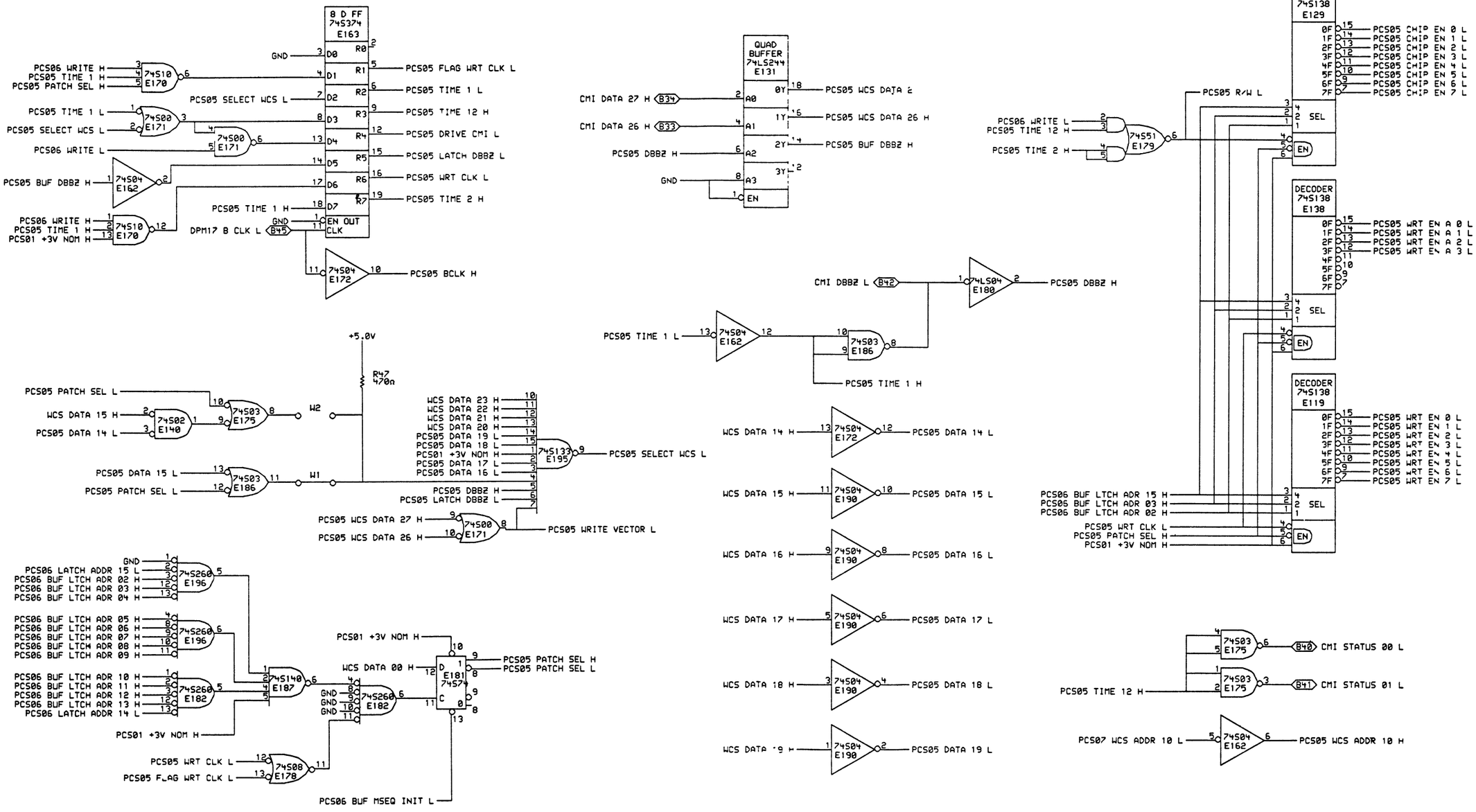
SIZE K | CODE CS | NUMBER L0008-0-03 | REV. A



REVISIONS		
CHK	CHANGE NO.	REV

DRN: T. Toomby
CHK: D.
DATE: 02-FEB-83
ENG:
DATE:
BOARD LOCATION:
SHEET 1 OF 1
TITLE: PCS04 PROM ARRAY
DSKE:<STARK>PCS04.DRW 17-JAN-83 10:30
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-04	A



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. D. Stark | DATE 02-FEB-83 | ENG. | DATE

CHK D. | DATE | BOARD LOCATION: | SHEET 1 OF 1

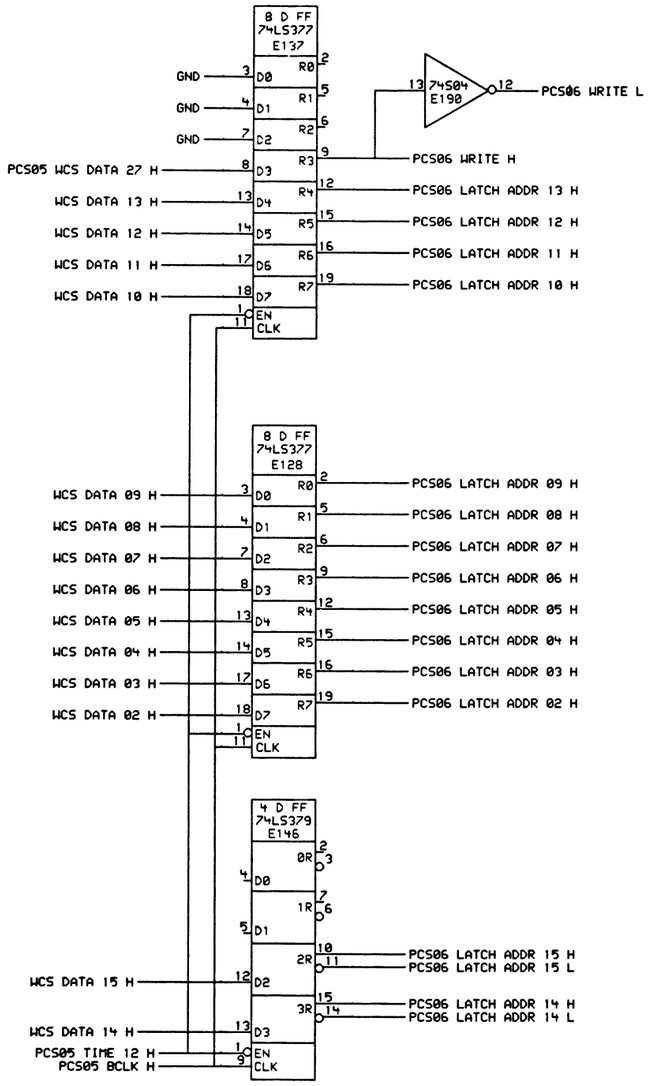
DSKE:<STARK>PCS05.DRW 17-JAN-83 10:30 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

TITLE: PCS05 CONTROL LOGIC

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-05	A

TW



REVISIONS		
CHK	CHANGE NO.	REV

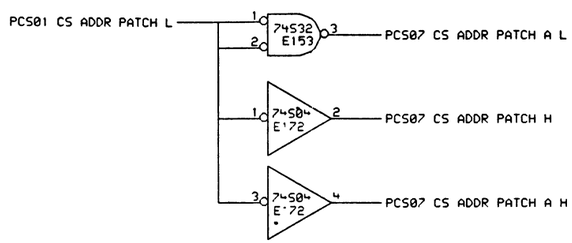
DSKE:<STARK>PCS06.DRW 17-JAN-83 10:31
FIRST USED ON OPTION/MODEL:

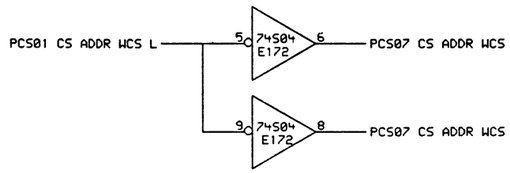
DRW. S.Toomey 02-FEB-83
CHK'D.
ENG. [signature] DATE 02-FEB-83
DATE
BOARD LOCATION:
SHEET 1 OF 1
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

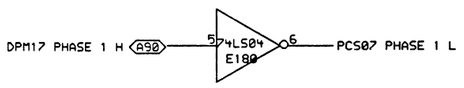
TITLE: PCS06 CONTROL LOGIC

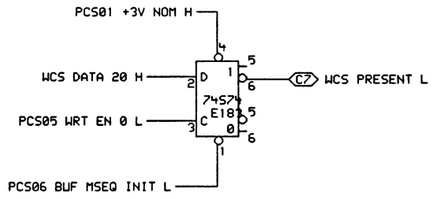
SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-06	A

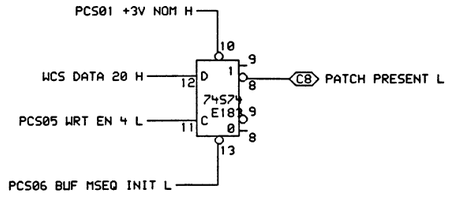
REV. A
NUMBER L0008-0-06
SIZE K CODE CS

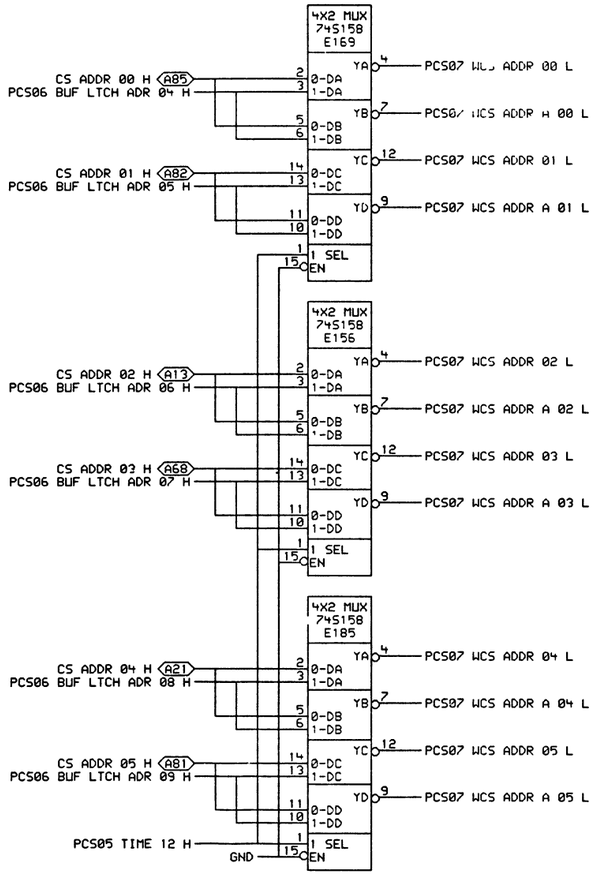


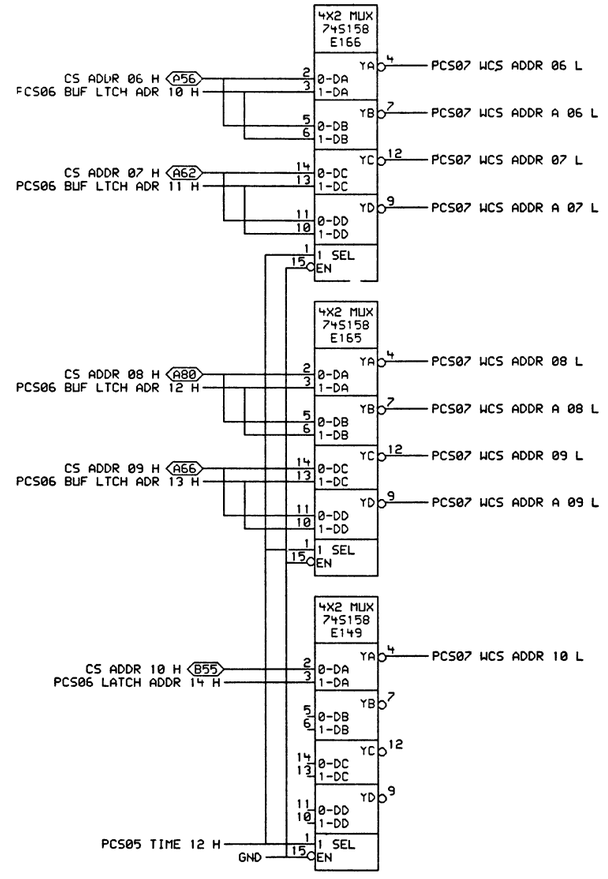












REVISIONS		
CHK	CHANGE NO.	REV

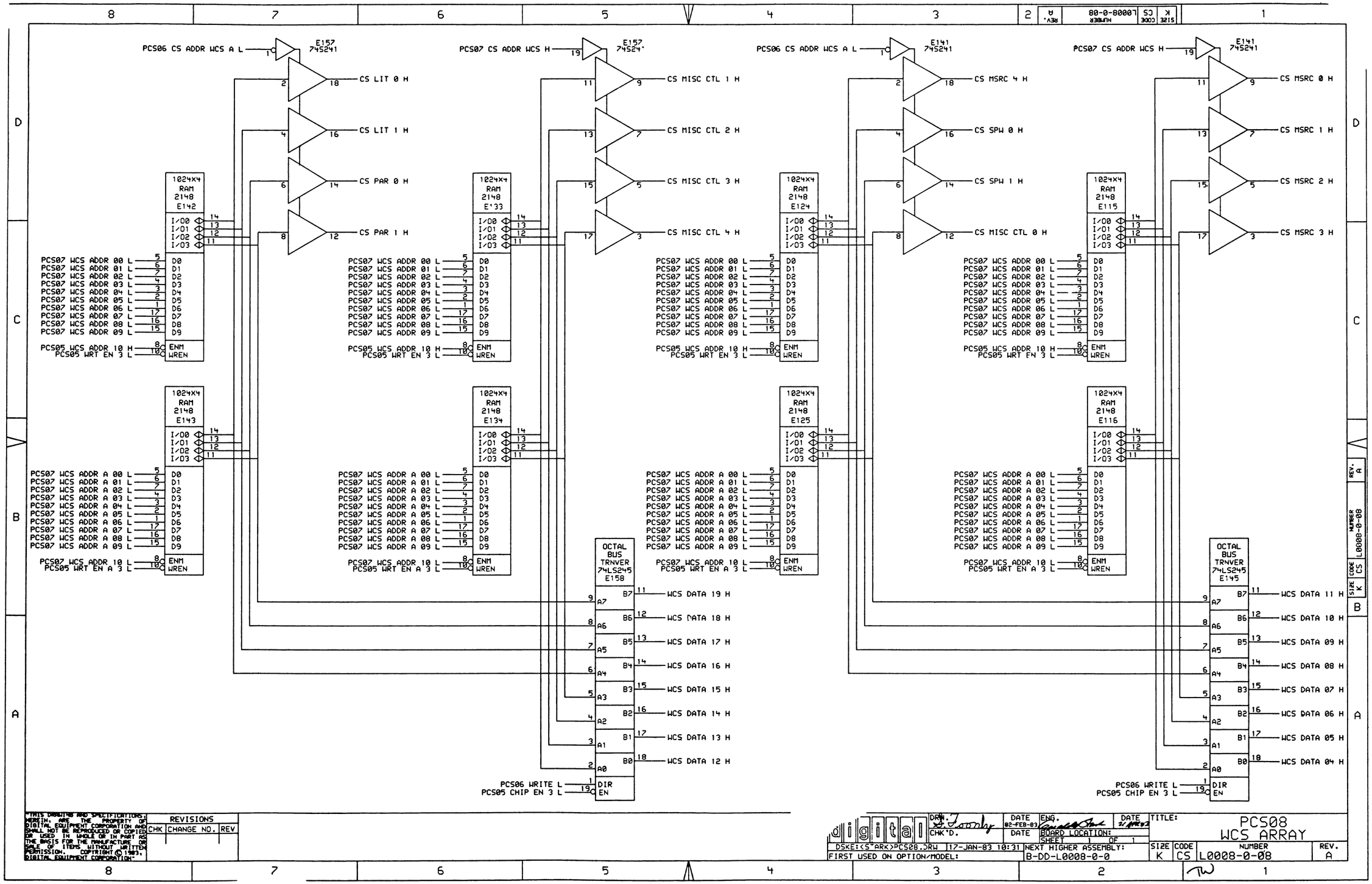
DRN: J. Toomey
CHK'D.
DATE 02-FEB-83
ENG. Andrew Sue
DATE 27-MAR-83
DATE
BOARD LOCATION:
SHEET 1 OF 1

DSKE:<S*ARK>PCS07.DRW 17-JAN-83 10:31
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS07 CMI TRANCEIVERS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-07	A

TW



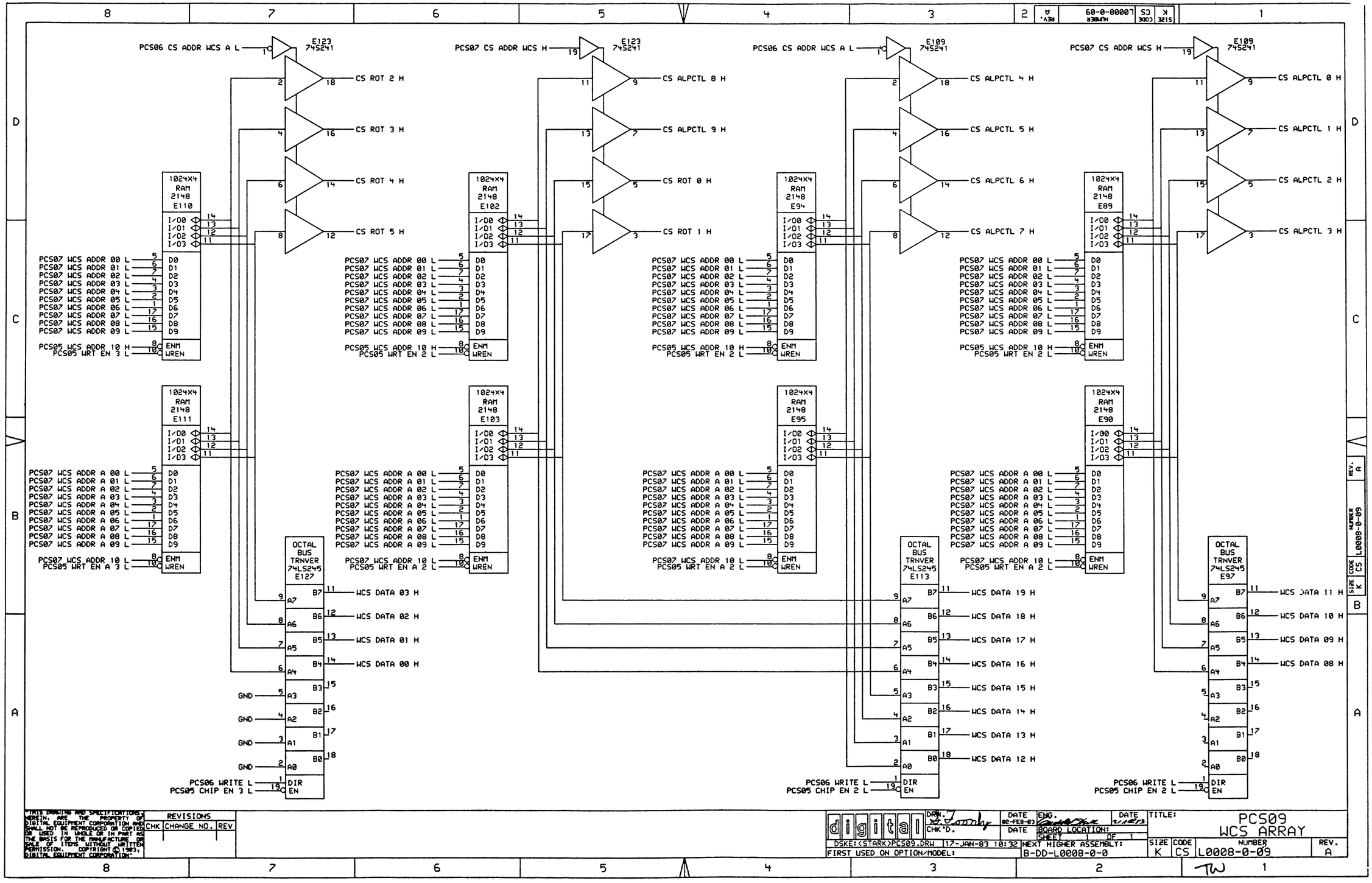
REVISIONS		
CHK	CHANGE NO.	REV

DRW. S.Toomey	DATE 02-FEB-83	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION:	
		SHEET 1 OF 1	
DSKET:<S*ARK>PCS08.DRW 17-JAN-83 10:31		NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL:		B-DD-L0008-0-0	

TITLE: PCS08 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-08	A

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-08	A



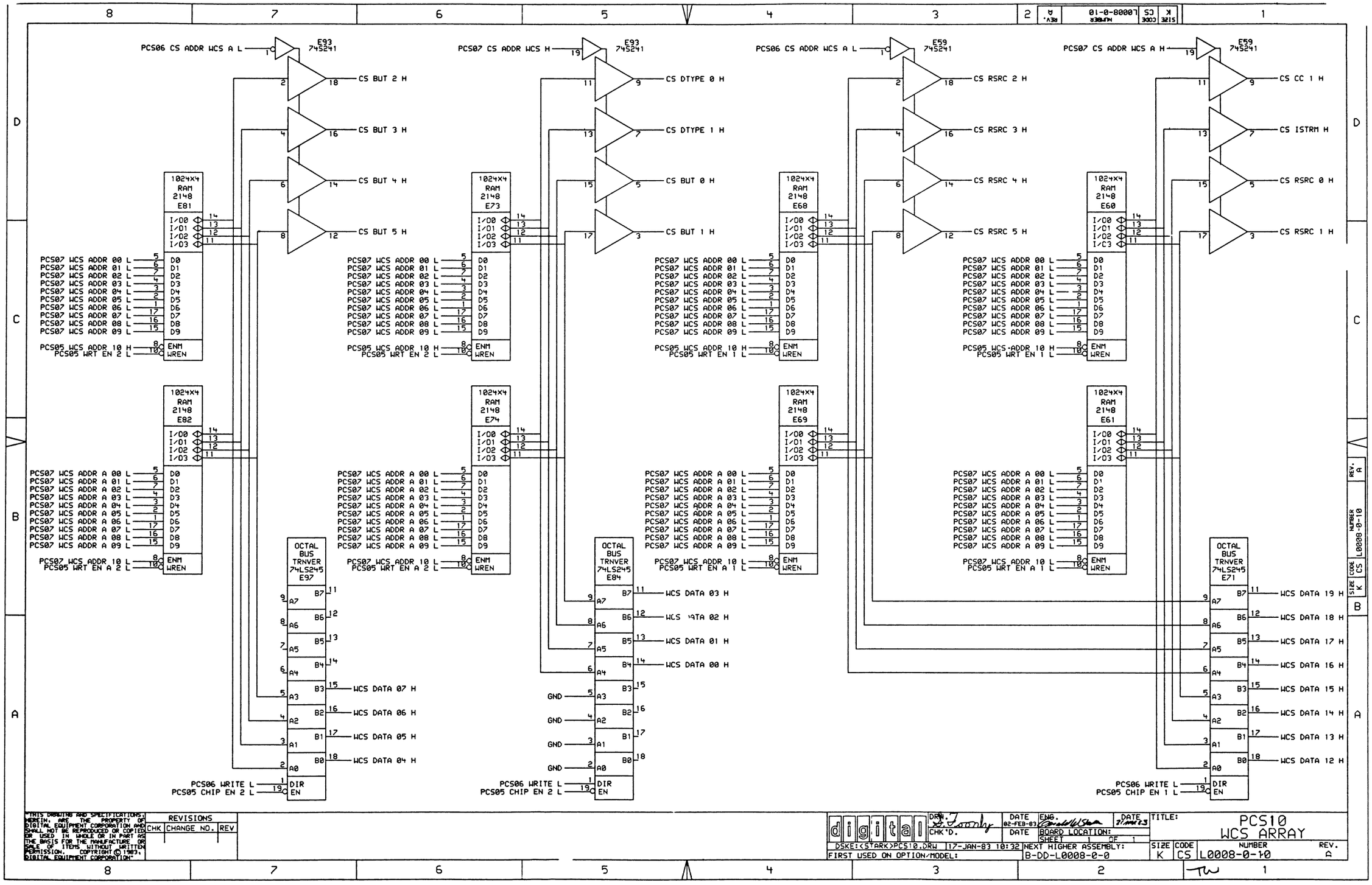
REVISIONS		
CHK	CHANGE NO.	REV

DRW. L. Stark	DATE 02-FEB-83	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION:	
		SHEET 1 OF 1	
DSKE:<STARK>PCS09.DRW	17-JAN-83 10:32	NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL:		B-DD-L0008-0-0	

TITLE: PCS09 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-09	A

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-09	A



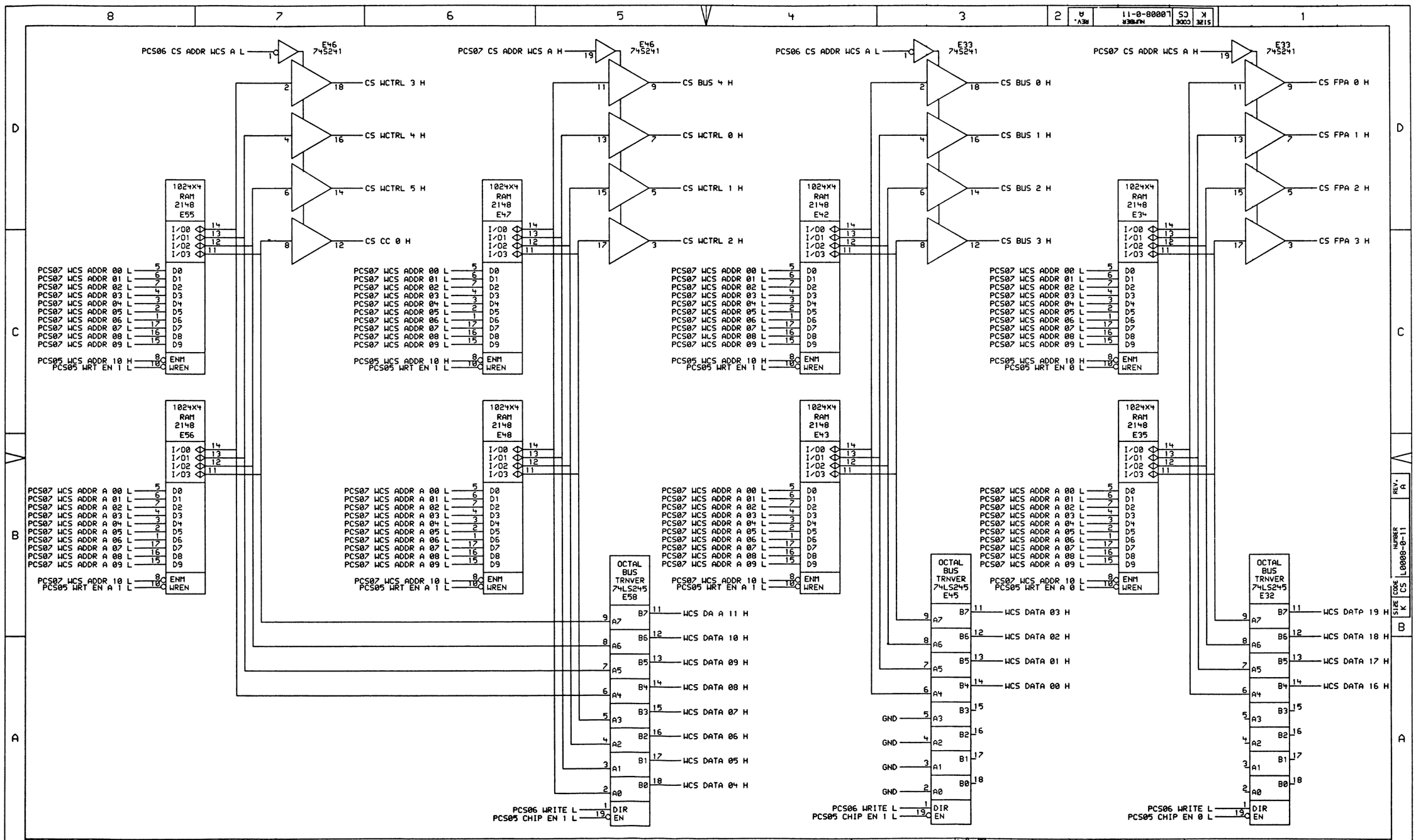
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRW. D. Toomey
CHK'D.
DATE 02-FEB-83
ENG.
DATE
DATE 2/MAR/83
BOARD LOCATION:
SHEET 1 OF 1
DSKE:<STARK>PCS10.DRW 17-JAN-83 10:32
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS10 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-10	A



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REVISIONS		
CHK	CHANGE NO.	REV

digital

DRW. S. Toomey — DATE 02-FEB-83
CHK'D. — DATE
ENG. — DATE
BOARD LOCATION:
SHEET 1 OF 1

DSKE:<STARK>PCS11.DRW 17-JAN-83 10:32
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS1 WCS ARRAY

SIZE	CODE	NUMBER	REV.
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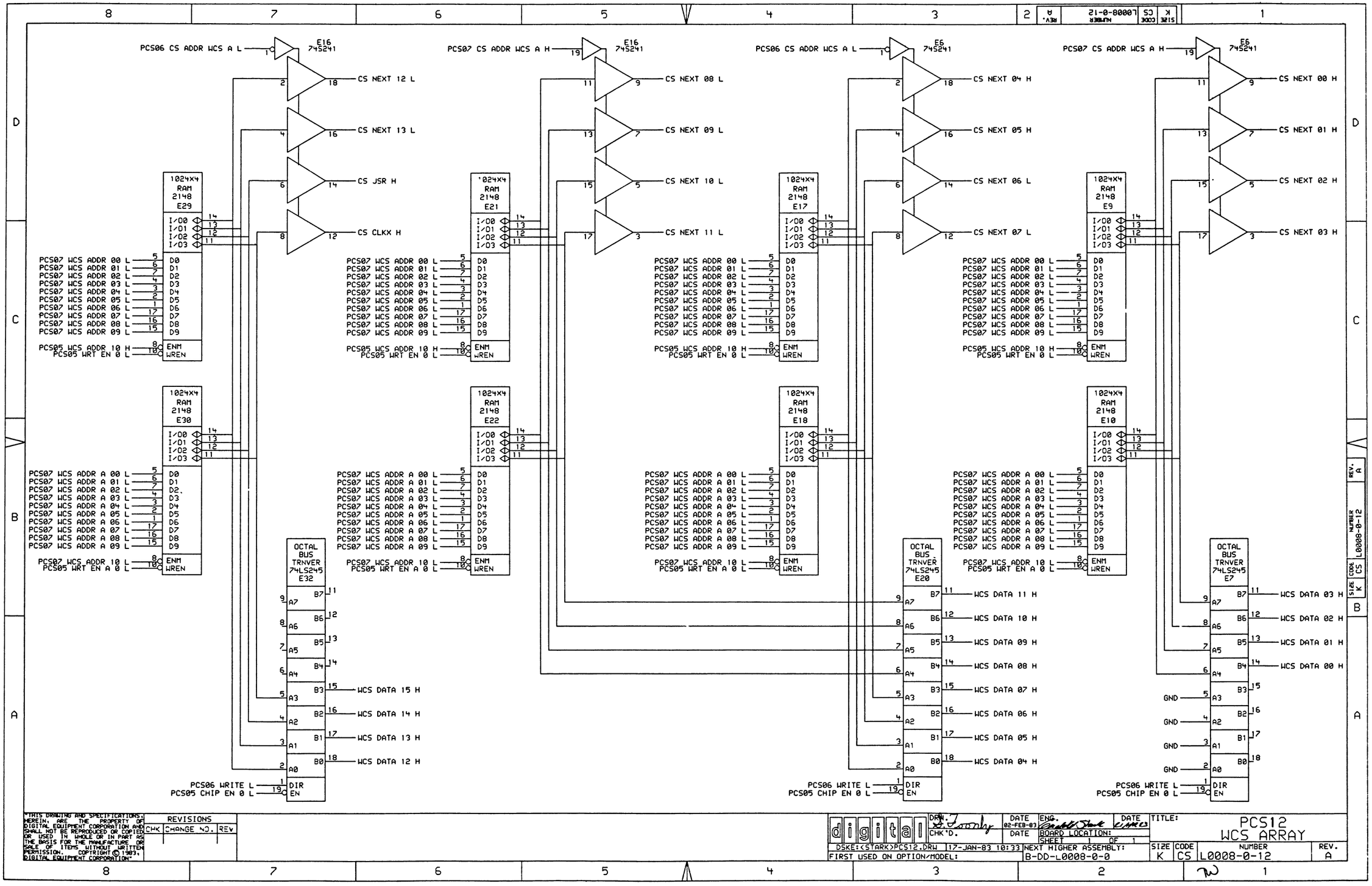
PCS06 CS ADDR WCS A L
E16
74S241
CS NEXT 12 L
CS NEXT 13 L
CS JSR H
CS CLKX H
PCS07 CS ADDR WCS A H
CS NEXT 08 L
CS NEXT 09 L
CS NEXT 10 L
CS NEXT 11 L
PCS06 CS ADDR WCS A L
E6
CS NEXT 04 H
CS NEXT 05 H
CS NEXT 06 L
CS NEXT 07 L
PCS07 CS ADDR WCS A H
CS NEXT 00 H
CS NEXT 01 H
CS NEXT 02 H
CS NEXT 03 H
1024X4 RAM 2148
E29
E30
E21
E22
E17
E18
E9
E10
I/O0
I/O1
I/O2
I/O3
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
ENM
WREN
PCS07 WCS ADDR 00 L
PCS07 WCS ADDR 01 L
PCS07 WCS ADDR 02 L
PCS07 WCS ADDR 03 L
PCS07 WCS ADDR 04 L
PCS07 WCS ADDR 05 L
PCS07 WCS ADDR 06 L
PCS07 WCS ADDR 07 L
PCS07 WCS ADDR 08 L
PCS07 WCS ADDR 09 L
PCS05 WCS ADDR 10 H
PCS05 WRT EN 0 L
PCS07 WCS ADDR A 00 L
PCS07 WCS ADDR A 01 L
PCS07 WCS ADDR A 02 L
PCS07 WCS ADDR A 03 L
PCS07 WCS ADDR A 04 L
PCS07 WCS ADDR A 05 L
PCS07 WCS ADDR A 06 L
PCS07 WCS ADDR A 07 L
PCS07 WCS ADDR A 08 L
PCS07 WCS ADDR A 09 L
PCS07 WCS ADDR 10 L
PCS05 WRT EN A 0 L
OCTAL BUS TRNVER 74LS245
E32
E20
E7
A7
A6
A5
A4
A3
A2
A1
A0
B7
B6
B5
B4
B3
B2
B1
B0
DIR
EN
WCS DATA 15 H
WCS DATA 14 H
WCS DATA 13 H
WCS DATA 12 H
WCS DATA 11 H
WCS DATA 10 H
WCS DATA 09 H
WCS DATA 08 H
WCS DATA 07 H
WCS DATA 06 H
WCS DATA 05 H
WCS DATA 04 H
WCS DATA 03 H
WCS DATA 02 H
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GND
PCS06 WRITE L
PCS05 CHIP EN 0 L
REV. A
NUMBER L0008-0-12
CODE CS
SIZE K
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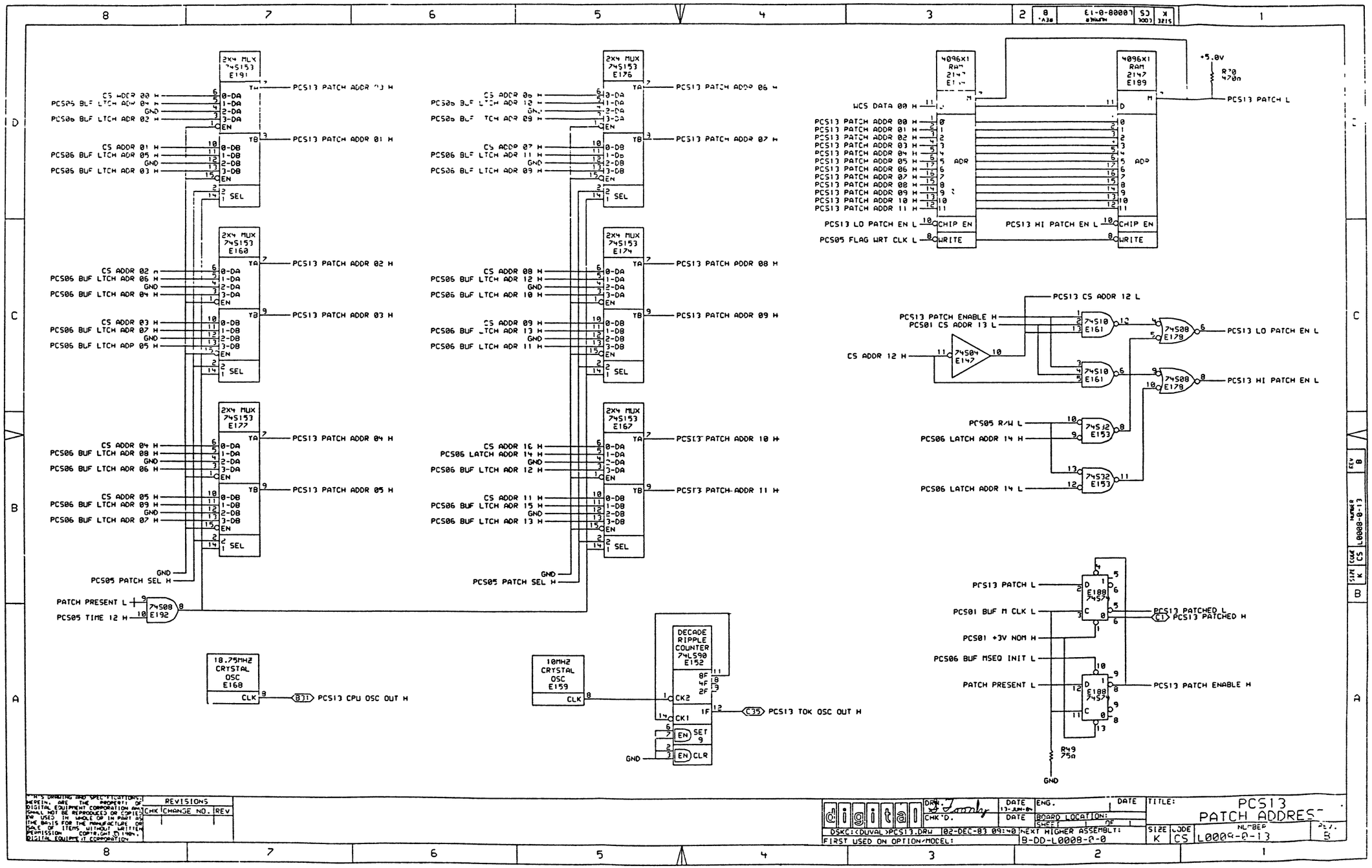
REVISIONS
CHK
CHANGE NO.
REV
digital
DRN. D. Toomey
DATE 02-FEB-83
ENG.
DATE
CHK'D.
DATE
BOARD LOCATION:
SHEET 1 OF 1
DSKE:<STARK>PCS12.DRW 17-JAN-83 10:33
NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL:
B-DD-L0008-0-0
TITLE:
PCS12
WCS ARRAY
SIZE K
CODE CS
NUMBER L0008-0-12
REV. A

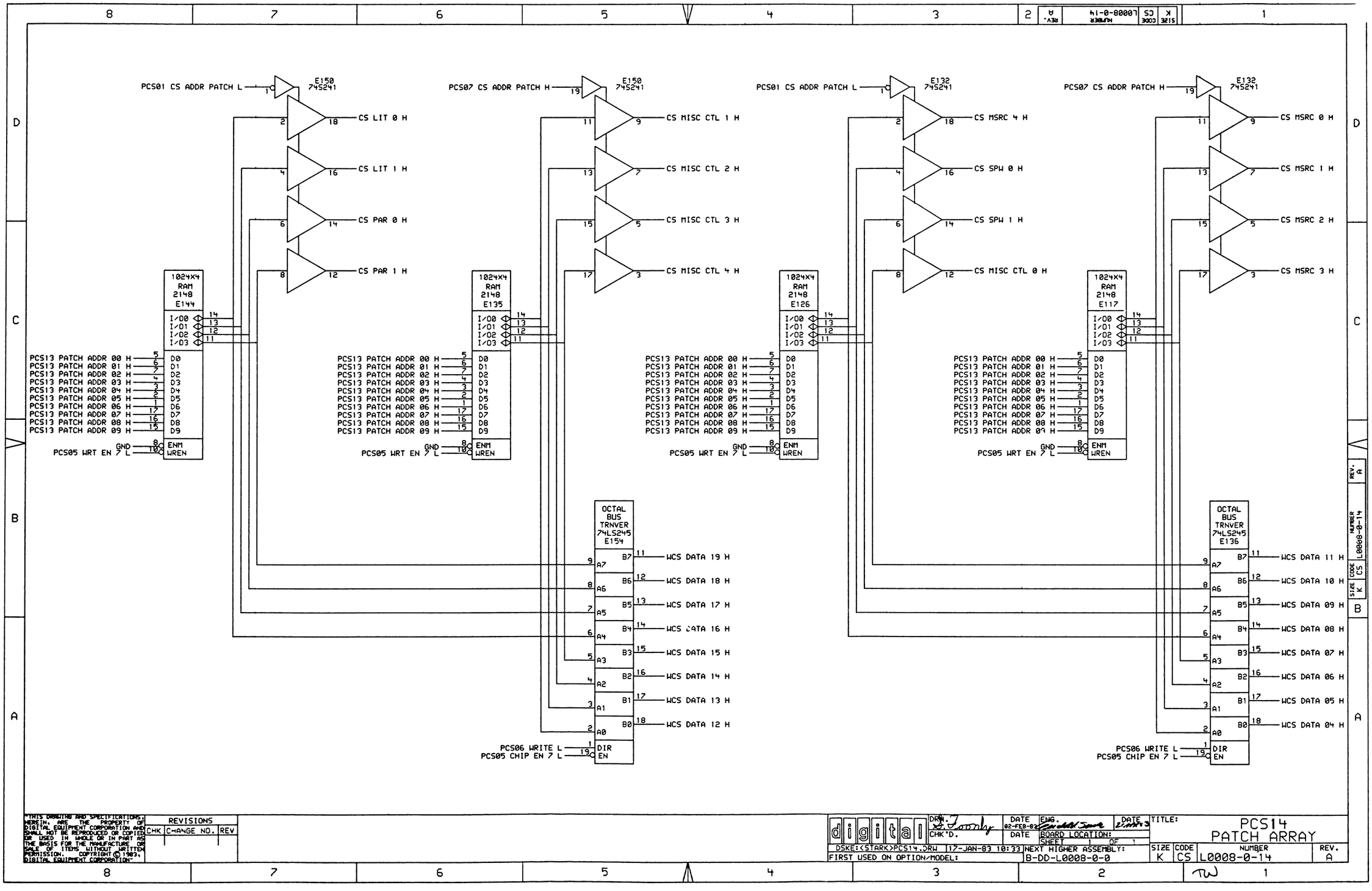


REVISIONS		
CHK	CHANGE NO.	REV

DRW.	DATE	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: SHEET 1 OF 1	
DSKC:<DUVAL>PCS13.DRW	02-DEC-83 09:40	NEXT HIGHER ASSEMBLY: B-DD-L0008-A-0	
FIRST USED ON OPTION/MODEL:			

TITLE: PCS13 PATCH ADDRESS

SIZE	CODE	NUMBER	REV
K	CS	L0008-A-0-13	B



REVISIONS

CHK	CHANGE NO.	REV

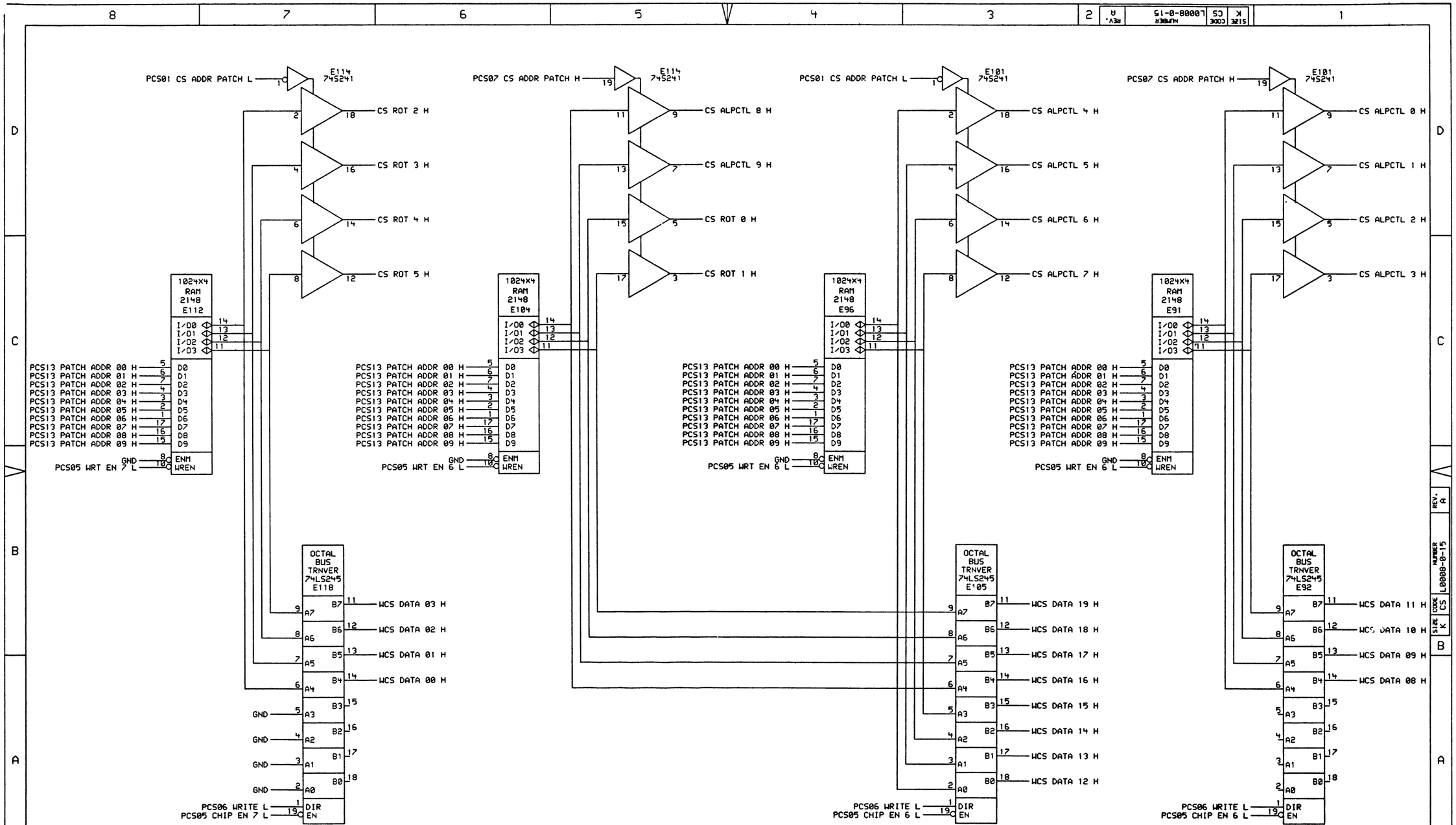
digital

DRW. S. Toomey 17-JAN-83
CHK D.
ENG. DATE 02-FEB-83
BOARD LOCATION:
SHEET 1 OF 1
DSKE:<STARK>PCS14.DRW 17-JAN-83 10:33
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS14 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-14	A

TW

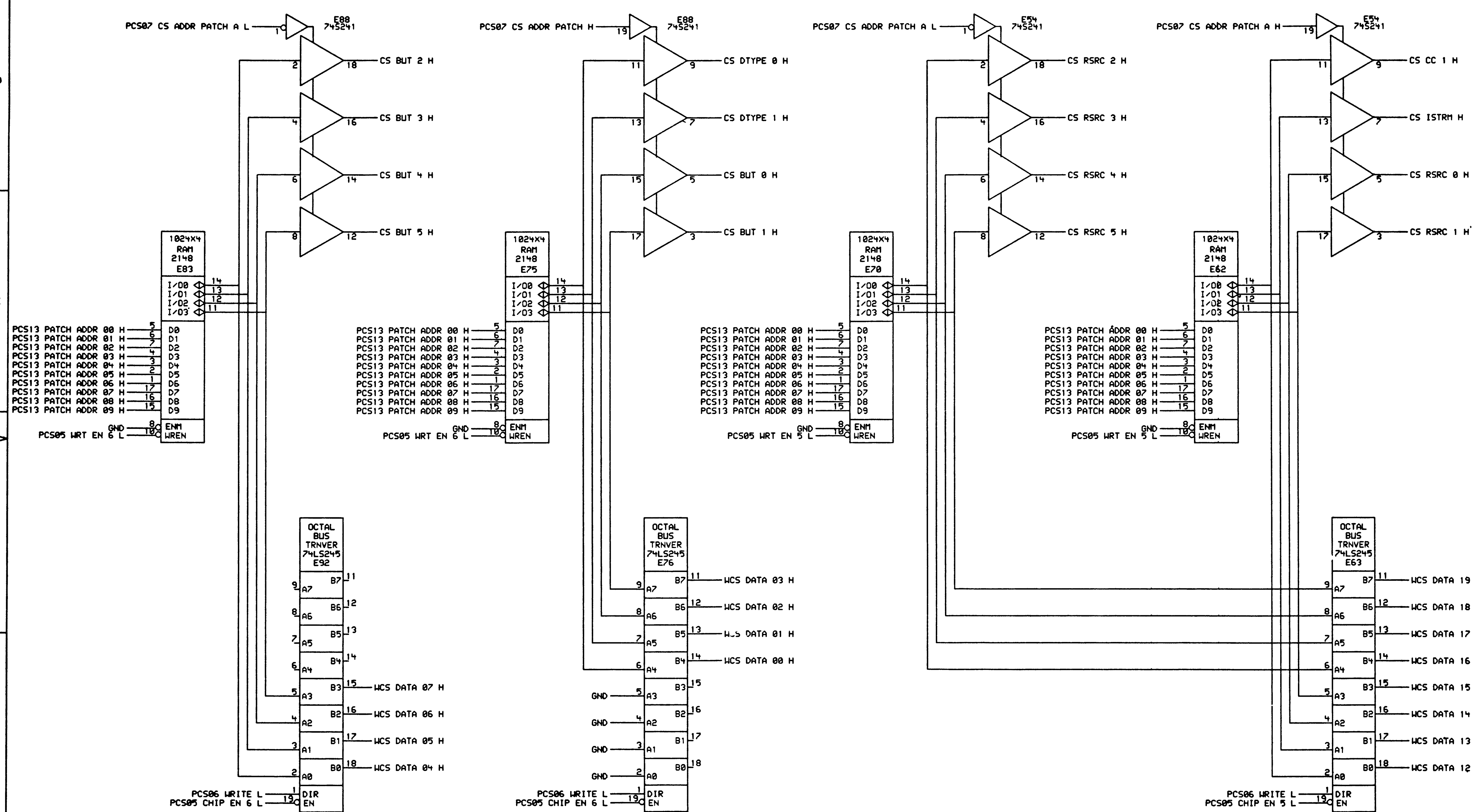


REVISIONS		
CHK	CHANGE NO.	REV

DRN. Jacoby	DATE 02-FEB-83	ENG.	DATE 8/16/83
CHK'D.	DATE	BOARD LOCATION:	
		SHEET 1 OF 1	
DSKE:<STARK>PCS15.DRW 17-JAN-83 10:34		NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0	
FIRST USED ON OPTION/MODEL:			

TITLE: PCS15 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-15	A



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. | DATE 02-FEB-83 | ENG. | DATE | CHK'D. | DATE

BOARD LOCATION:

SHEET 1 OF 1

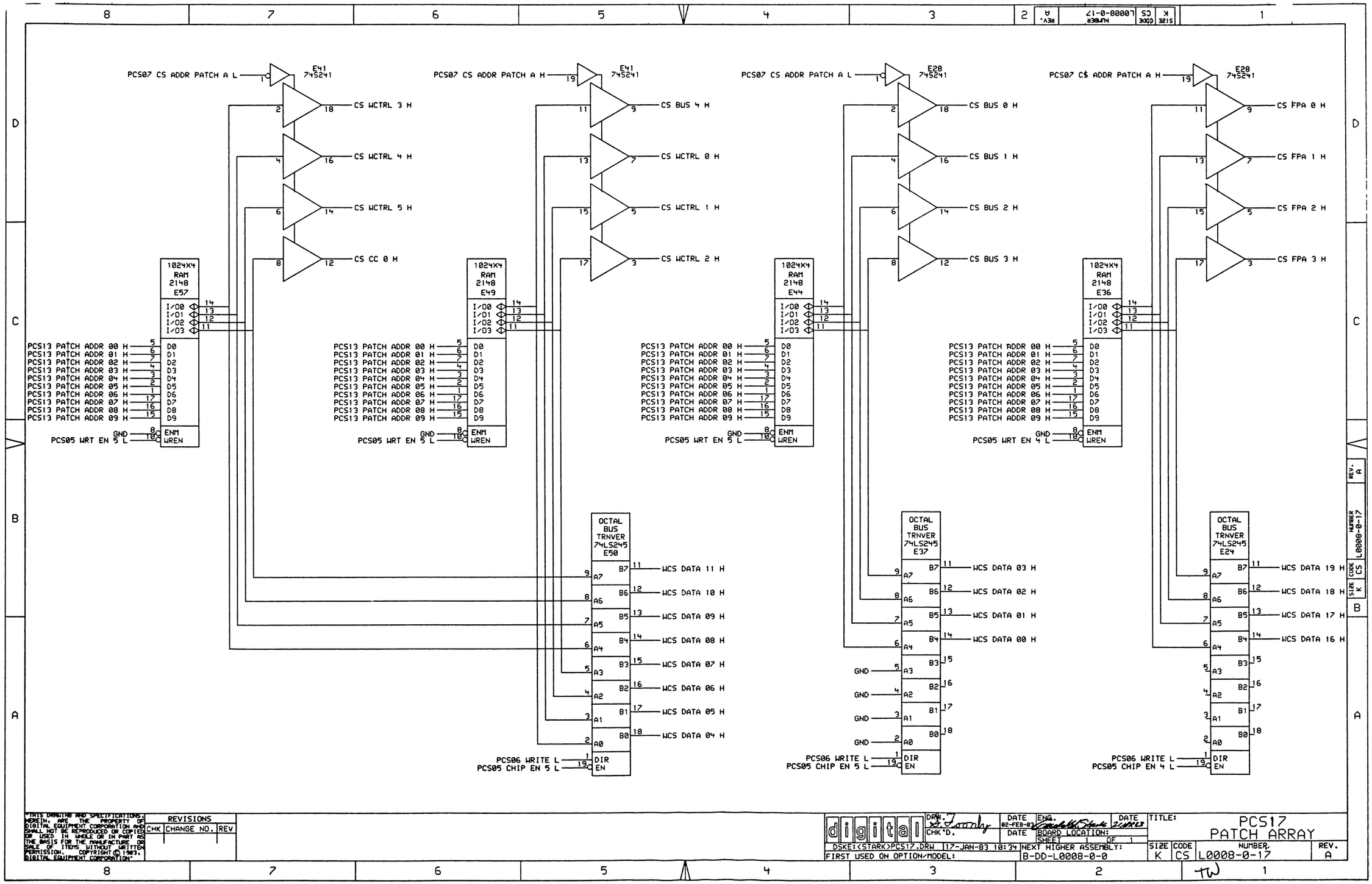
DSKE:<STARK>PCS16.DRW 17-JAN-83 10:34

NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

TITLE: PCS16 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-16	A



REVISIONS		
CHK	CHANGE NO.	REV

DRW. T. Toomey 02-FEB-83
CHK D.
ENG. 21-MAR-83
DATE
BOARD LOCATION:
SHEET 1 OF 1

DSKE:<STARK>PCS17.DRW 17-JAN-83 10:34
NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL:
B-DD-L0008-0-0

TITLE: PCS17 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-17	A

SIZE K | CODE CS | NUMBER L0008-0-17 | REV. A | B

PCS07 CS ADDR PATCH A L

E8 74S241

CS NEXT 12 L
CS NEXT 13 L
CS JSR H
CS CLKX H

1024X4 RAM 2148 E31

PCS13 PATCH ADDR 00 H
PCS13 PATCH ADDR 01 H
PCS13 PATCH ADDR 02 H
PCS13 PATCH ADDR 03 H
PCS13 PATCH ADDR 04 H
PCS13 PATCH ADDR 05 H
PCS13 PATCH ADDR 06 H
PCS13 PATCH ADDR 07 H
PCS13 PATCH ADDR 08 H
PCS13 PATCH ADDR 09 H
PCS05 WRT EN 4 L

I/O0 I/O1 I/O2 I/O3
D0 D1 D2 D3 D4 D5 D6 D7 D8 D9
GND
ENM WREN

OCTAL BUS TRNVER 74LS245 E24

A7 A6 A5 A4 A3 A2 A1 A0
B7 B6 B5 B4 B3 B2 B1 B0
WCS DATA 15 H
WCS DATA 14 H
WCS DATA 13 H
WCS DATA 12 H
PCS06 WRITE L
PCS05 CHIP EN 4 L
DIR EN

PCS07 CS ADDR PATCH A H

E8 74S241

CS NEXT 08 L
CS NEXT 09 L
CS NEXT 10 L
CS NEXT 11 L

1024X4 RAM 2148 E23

PCS13 PATCH ADDR 00 H
PCS13 PATCH ADDR 01 H
PCS13 PATCH ADDR 02 H
PCS13 PATCH ADDR 03 H
PCS13 PATCH ADDR 04 H
PCS13 PATCH ADDR 05 H
PCS13 PATCH ADDR 06 H
PCS13 PATCH ADDR 07 H
PCS13 PATCH ADDR 08 H
PCS13 PATCH ADDR 09 H
PCS05 WRT EN 4 L

I/O0 I/O1 I/O2 I/O3
D0 D1 D2 D3 D4 D5 D6 D7 D8 D9
GND
ENM WREN

PCS07 CS ADDR PATCH A L

E1 74S241

CS NEXT 04 H
CS NEXT 05 H
CS NEXT 06 L
CS NEXT 07 L

1024X4 RAM 2148 E19

PCS13 PATCH ADDR 00 H
PCS13 PATCH ADDR 01 H
PCS13 PATCH ADDR 02 H
PCS13 PATCH ADDR 03 H
PCS13 PATCH ADDR 04 H
PCS13 PATCH ADDR 05 H
PCS13 PATCH ADDR 06 H
PCS13 PATCH ADDR 07 H
PCS13 PATCH ADDR 08 H
PCS13 PATCH ADDR 09 H
PCS05 WRT EN 4 L

I/O0 I/O1 I/O2 I/O3
D0 D1 D2 D3 D4 D5 D6 D7 D8 D9
GND
ENM WREN

OCTAL BUS TRNVER 74LS245 E12

A7 A6 A5 A4 A3 A2 A1 A0
B7 B6 B5 B4 B3 B2 B1 B0
WCS DATA 11 H
WCS DATA 10 H
WCS DATA 09 H
WCS DATA 08 H
WCS DATA 07 H
WCS DATA 06 H
WCS DATA 05 H
WCS DATA 04 H
PCS06 WRITE L
PCS05 CHIP EN 4 L
DIR EN

PCS07 CS ADDR PATCH A H

E1 74S241

CS NEXT 00 H
CS NEXT 01 H
CS NEXT 02 H
CS NEXT 03 H

1024X4 RAM 2148 E11

PCS13 PATCH ADDR 00 H
PCS13 PATCH ADDR 01 H
PCS13 PATCH ADDR 02 H
PCS13 PATCH ADDR 03 H
PCS13 PATCH ADDR 04 H
PCS13 PATCH ADDR 05 H
PCS13 PATCH ADDR 06 H
PCS13 PATCH ADDR 07 H
PCS13 PATCH ADDR 08 H
PCS13 PATCH ADDR 09 H
PCS05 WRT EN 4 L

I/O0 I/O1 I/O2 I/O3
D0 D1 D2 D3 D4 D5 D6 D7 D8 D9
GND
ENM WREN

OCTAL BUS TRNVER 74LS245 E2

A7 A6 A5 A4 A3 A2 A1 A0
B7 B6 B5 B4 B3 B2 B1 B0
WCS DATA 03 H
WCS DATA 02 H
WCS DATA 01 H
WCS DATA 00 H
GND GND GND GND
PCS06 WRITE L
PCS05 CHIP EN 4 L
DIR EN

SIZE K | CODE CS | NUMBER L0008-0-18 | REV. A

REVISIONS		
CHK	CHANGE NO.	REV

digital

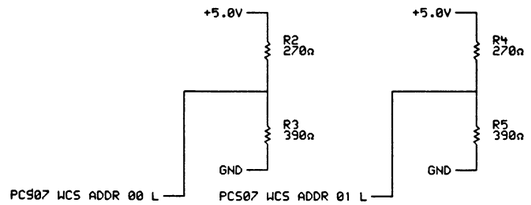
DRN. E.Toomey | DATE 02-FEB-83 | ENG. [signature] | DATE 11-MAR-83 | CHK'D. | DATE | BOARD LOCATION: | SHEET 1 OF 1

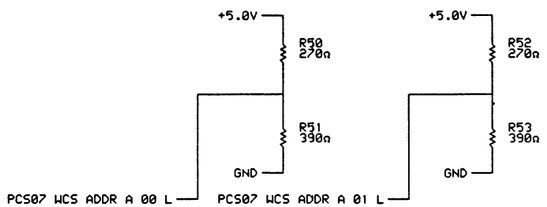
DSKE:<STARK>PCS18.DRW 17-JAN-83 10:35 | NEXT HIGHER ASSEMBLY: | FIRST USED ON OPTION/MODEL: | B-DD-L0008-0-0

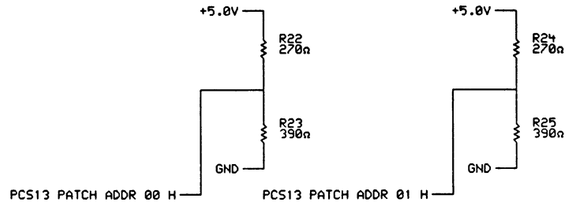
TITLE: PCS18 PATCH ARRAY

SIZE K | CODE CS | NUMBER L0008-0-18 | REV. A

TW







REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. S. Toomey — DATE 02-FEB-83 — ENG. — DATE
CHK'D. — DATE — BOARD LOCATION: — SHEET 1 OF 1

DSKE:<STARK>PCS19.DRW 17-JAN-83 10:35 — NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS19 TERMINATORS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-19	A

REV. A
NUMBER L0008-0-19
CODE CS
SIZE K

REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. (signature) DATE 02-FEB-83 | ENG. (signature) DATE
CHK'D. DATE | BOARD LOCATION:
SHEET 1 OF 1

DSKE:<STARK>PCS20.DRW 17-JAN-83 10:35

NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

TITLE: PCS20

SIZE	CODE	NUMBER	REV.
K	CS	L0008-0-20	A

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YA	E

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
		L0008-YA	PARTS REVISION	A1 A2 A1 A2 A1 A2 B2
E-MD-5015549-0-0	7		DRILL AND ETCH DRAWING	A B B B B B B
		5015549-0	ETCH BOARD	B B B B B B B
E-UA-L0008-0-YA	1		UNIT ASSEMBLY	A A A A A A B
E-EC-5015549-YA-0	2		ETCH CUT L0008-YA	A A A A A A B
K-PL-L0008-0-DBP	3		PARTS LIST	A A B B B B C
K-PC-L0008-0-DBI	–		P.C. DATABASE	B B B B B B B
K-CS-L0008-YA-01	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-02	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-03	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-04	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-05	1		SCHEMATIC	A A A A A A B
K-CS-L0008-YA-06	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-07	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-08	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-09	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-10	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-11	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-12	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-13	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-14	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-15	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-16	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-17	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-18	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-19	1		SCHEMATIC	A A A A A A A

NOTES:

REVISIONS								
REV.		B	C	C	D	D	E	
CHG NO.		TW001	TW002	TW002	TW003	TW003	TW004	
DATE		7-83	11-83	11-83	11-83	11-83	7-84	

digital

USED ON OPTION/MODEL		DRN. D FOURNIER	5-8-84	TITLE PCS
		CHK'D		SIZE B | CODE DD | NUMBER L0008-YA | REV. E
		ENG.		SHEET 1 OF 2
		PROD.		

DRB 126

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YA	E

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
K-CS-L0008-YA-20	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YA-DBS			DATA BASE	A A A A A A B

NOTES:

REVISIONS			
REV.	CHG NO.	DATE	
B	TW001	7-83	
C	TW002	11-83	
C	TW002	11-83	
D	TW003	11-83	
D	TW003	11-83	
E	TW004	7-84	

digital

USED ON OPTION/MODEL			
		DRN. D FOURNIER	5-9-84
		CHK'D	
		ENG.	
		PROD.	

TITLE: PCS

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YA	E

SHEET 2 OF 2

DRB 126

NOTES:
1. BOARD UL RATING IS 94V-0.
2. SPARE ICS ARE: E193, E197.

CHG	CHANGE NO	REV

STEP & REPEAT: + Y AXIS ____ STEP ____ TIMES; + X AXIS ____ STEP ____ TIMES

ETCH REV. A

SIGNATURES	DATE
DRN.	
CHK D.	
MECH. ENG.	
PROJ. ENG.	
PROD.	
SCALE	
SHT. 1 OF	
NEXT HIGHER ASSY.	

digital

TITLE PCS

SIZE	CODE	NUMBER	REV
E			

REWORK INSTRUCTIONS FCO #4

WIRE ADD SIDE 1:
4-2 FROM E179-4 TO E187-6

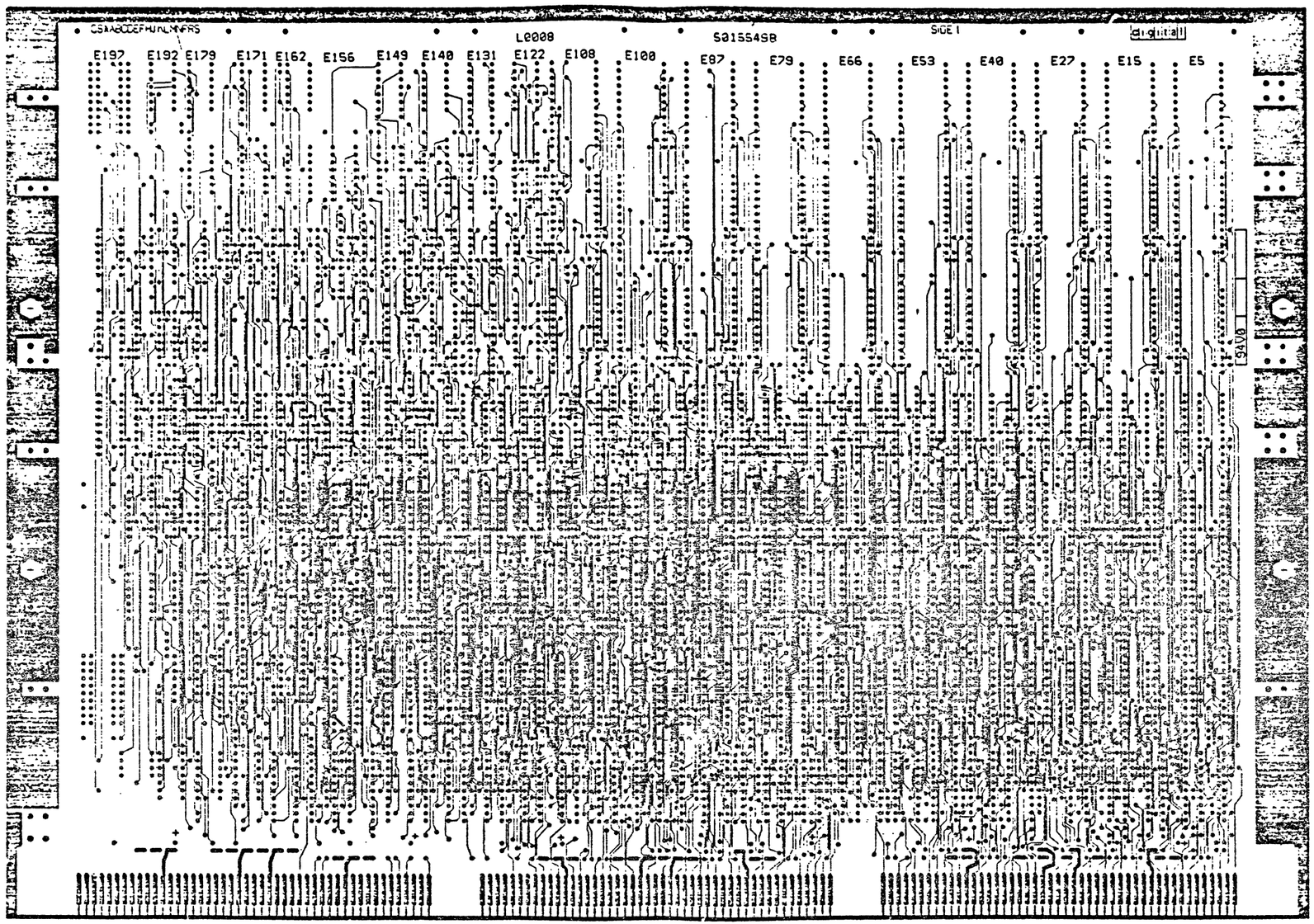
REVISION HISTORY		
DATE	ECO NUMBER	REV

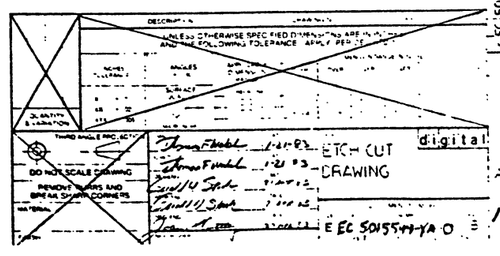
SIZE	CODE	DOCUMENT NUMBER	REV
E	UA	L0008-0 YA	B

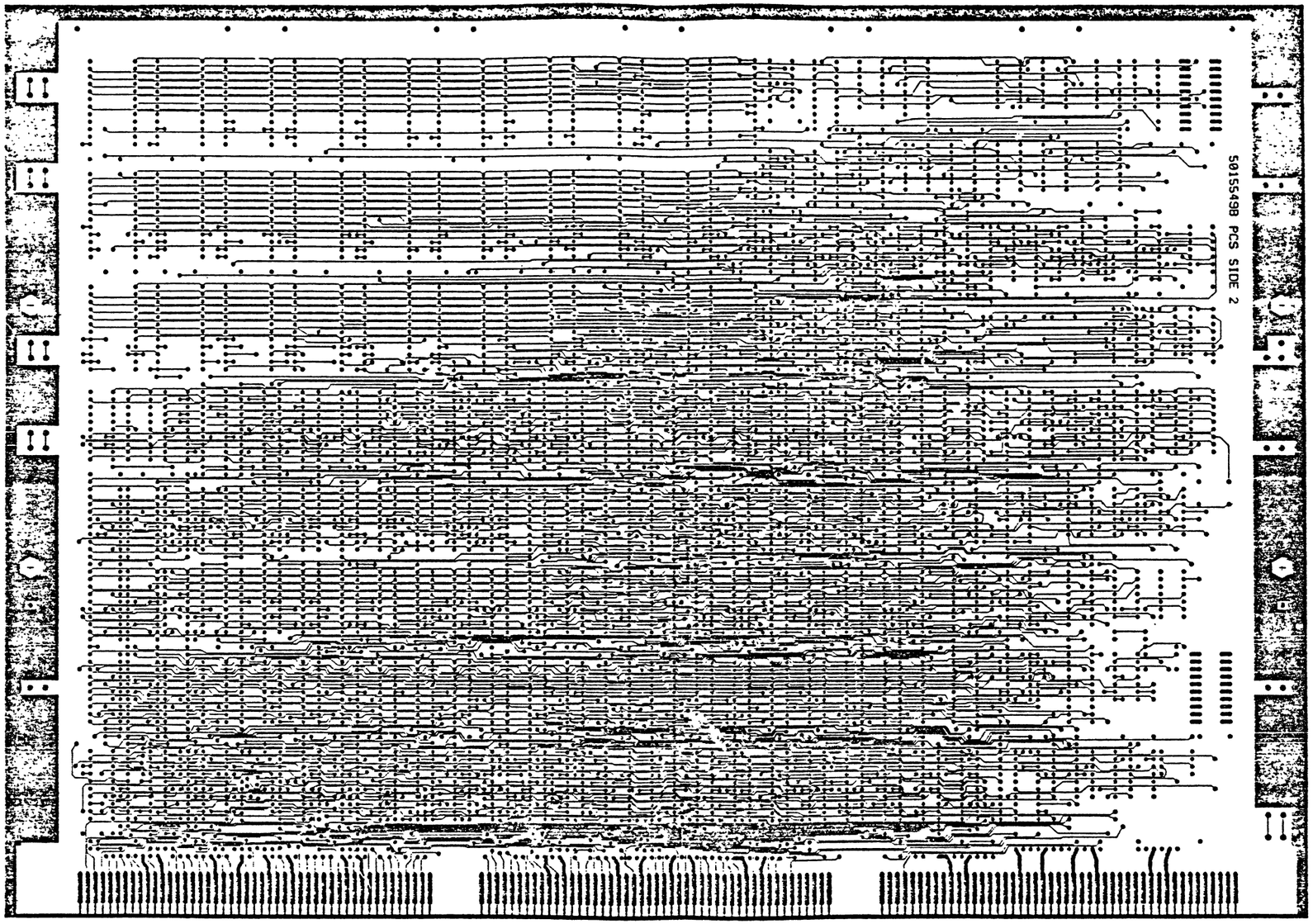
TITLE: PCS

SCALE: | SHEET 2 OF 2

SIZE E CODE UA NUMBER L0008-0-YA REV B


4-1
CSRABCDEFHJNLMPRS
L0008
S01554SB
SIDE 1
digital
E197 E192 E179 E171 E162 E156 E149 E140 E131 E122 E108 E100 E87 E79 E66 E53 E40 E27 E15 E5
9A10


digital
ETCH CUT
DRAWING
DO NOT SCALE DRAWING
EC 50155-YA O
10F3



TITLE
ETCH CUT DRAWING

DOCUMENT NUMBER
EEC 50155498YA-0 B

REWORK INSTRUCTIONS ECO #4

ETCH CUT SIDE 1:
4-1 BETWEEN E79-4 AND E79-5

REVISION HISTORY

DATE	ECO NUMBER	REV

TITLE ETCH CUT DRAWING

DOCUMENT NUMBER
LAB CODE EEC5015549-Y4-0 REV B

DECODER 74S138 E130

0F PCS01 SEL0 L
1F PCS01 SEL1 L
2F PCS01 SEL2 L
3F
4F PCS01 CS ADDR WCS L
5F
6F
7F

W4
W3
CS ADDR 13 H (B48)
CS ADDR 11 H (B56)
74S08 E192
CS ADDR 12 H (A59)
2 SEL
GND
EN
74S08 E178
PCS01 CS ADDR PATCH L
DPM14 DISABLE HI NEXT H (A49)
PCS13 PATCHED L
74S02 E140
74S00 E148
PCS07 PHASE 1 L
CS ADDR 13 H (B48)
74S04 E147
PCS01 CS ADDR 13 L

8 D FF 74S374 E173

CS NEXT 13 L (B57) D0 R0 (B37)
CS NEXT 12 L (B59) D1 R1 (B70)
CS NEXT 11 L (B60) D2 R2 (A67)
CS NEXT 10 L (B32) D3 R3 (B64)
CS NEXT 09 L (B75) D4 R4 (B61)
CS NEXT 08 L (B36) D5 R5 (A17)
CS NEXT 07 L (B35) D6 R6 (B68)
CS NEXT 06 L (B77) D7 R7 (B39)
GND EN OUT
CLK

+5.0V
R46 120Ω
C7 100NF 50V
GND
Q1 2N2369
DPM17 M CLK L (A63)
PCS01 BUF M CLK L
R42 200Ω
R48 75Ω
GND
DPM14 DISABLE HI NEXT H (A49)
+5.0V
R45 470Ω
CS ADDR 12 H (A59)
CS ADDR 11 H (B56)
74S03 E186
E18 74S74
74S32 E153
PCS01 +3V NOM H

74S240 E151 (2) → (B48) CS ADDR 13 H
74S240 E151 (4) → (A59) CS ADDR 12 H
74S240 E151 (6) → (B56) CS ADDR 11 H
74S240 E151 (8) → (B55) CS ADDR 10 H
74S240 E151 (11) → (A66) CS ADDR 09 H
74S240 E151 (13) → (A80) CS ADDR 08 H
74S240 E151 (15) → (A62) CS ADDR 07 H
74S240 E151 (17) → (A56) CS ADDR 06 H

PAR GEN 74S280 E164
EVEN
ODD
GND
D0 D1 D2 D3 D4 D5 D6 D7 D8
(B66)
74S03 E186
+5.0V
R1 470Ω
(A'0) CS HNEXT PAR H

+5.0V
R43 470Ω
R44 680Ω
GND
PCS01 +3V NOM H

REV.	NUMBER	CS CODE	SIZE
A	L0008-YA-01	CS	K

REVISIONS		
CHK	CHANGE NO.	REV

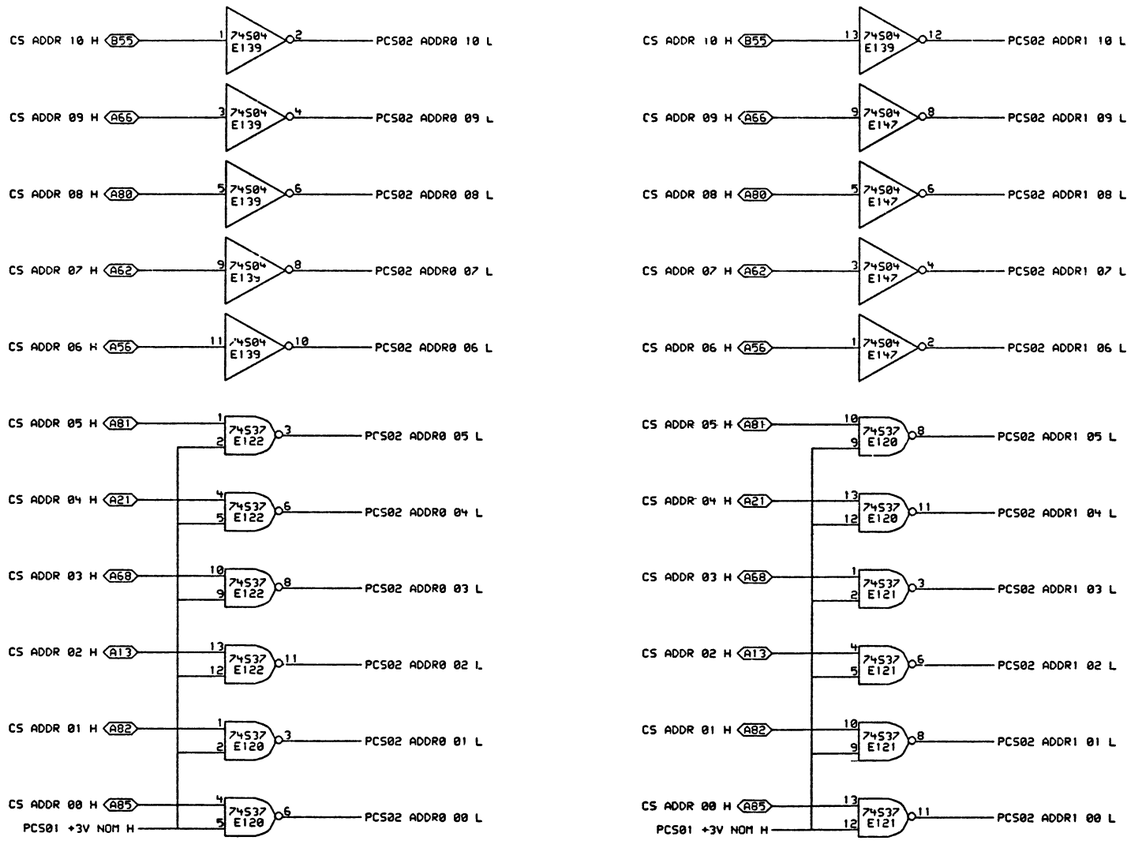
digital

DRN J. Toomey
CHK'D.
DATE 18-JAN-84
ENG.
DATE
BOARD LOCATION:
SHEET 1 OF 1

DSKD:<PLCURDE>PCYA01.DRW|18-APR-84 08:43|NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL:
B-DD-L0008-0-0

TITLE: PCS01 PATCH ADDRESS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-01	A



REVISIONS		
CHK	CHANGE NO.	REV

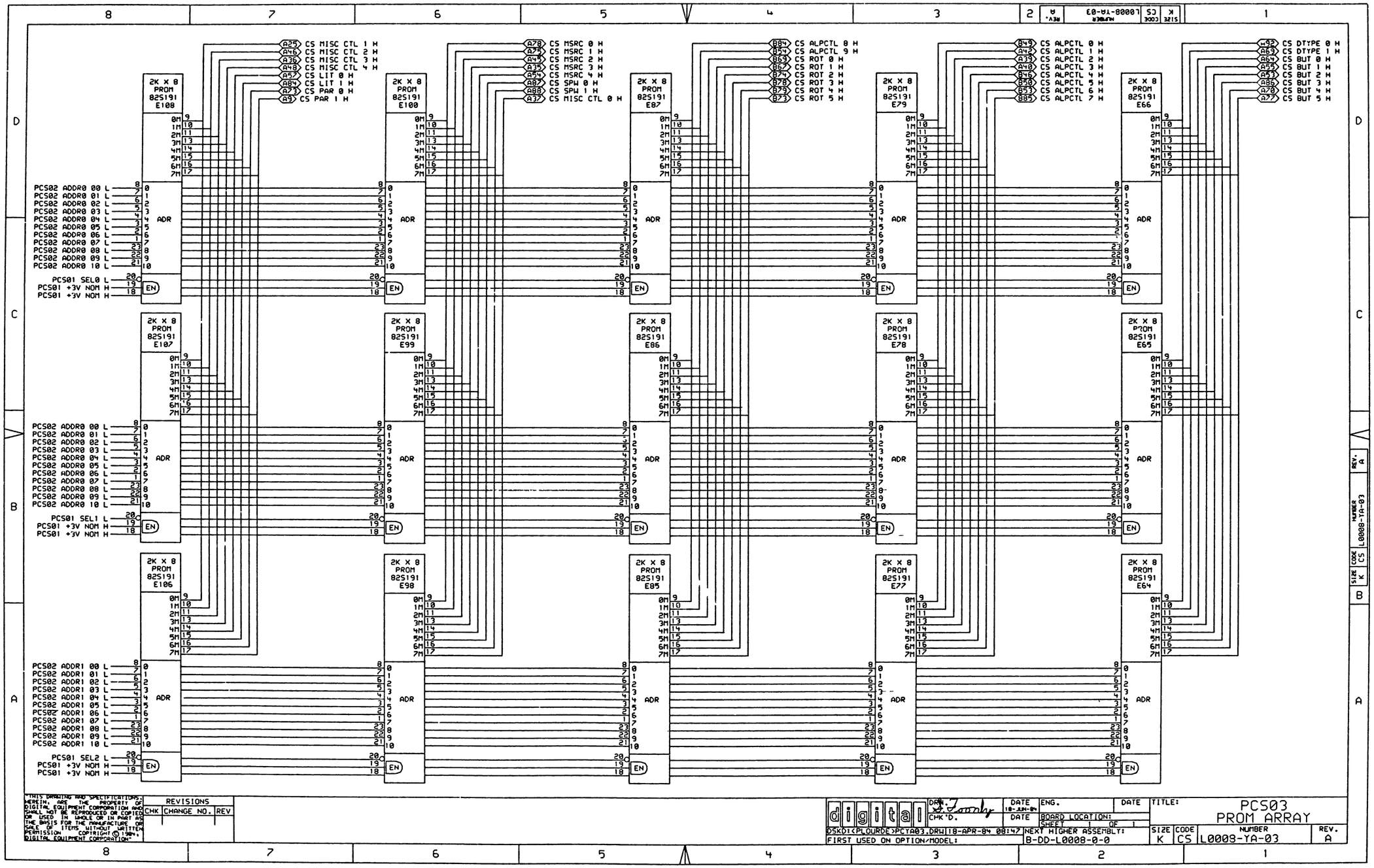
digital

DRN. J. Landry
CHK D.
DATE 18-JUN-84
ENG.
DATE
DATE
BOARD LOCATION:
SHEET 1 OF 1

DSKD:<PLOURDE>PCYA02.DRW|18-APR-84 08:46
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS02 ADDRESS BUFFERS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-02	A



REVISIONS

CHK	CHANGE NO.	REV

digital

DRN: D.Toomey — DATE: 18-APR-84 — ENG. — DATE

CHK'D. — DATE — BOARD LOCATION: — SHEET 1 OF 1

DSK01:<PLOURDE>PCTA03.DRW;18-APR-84 08:47

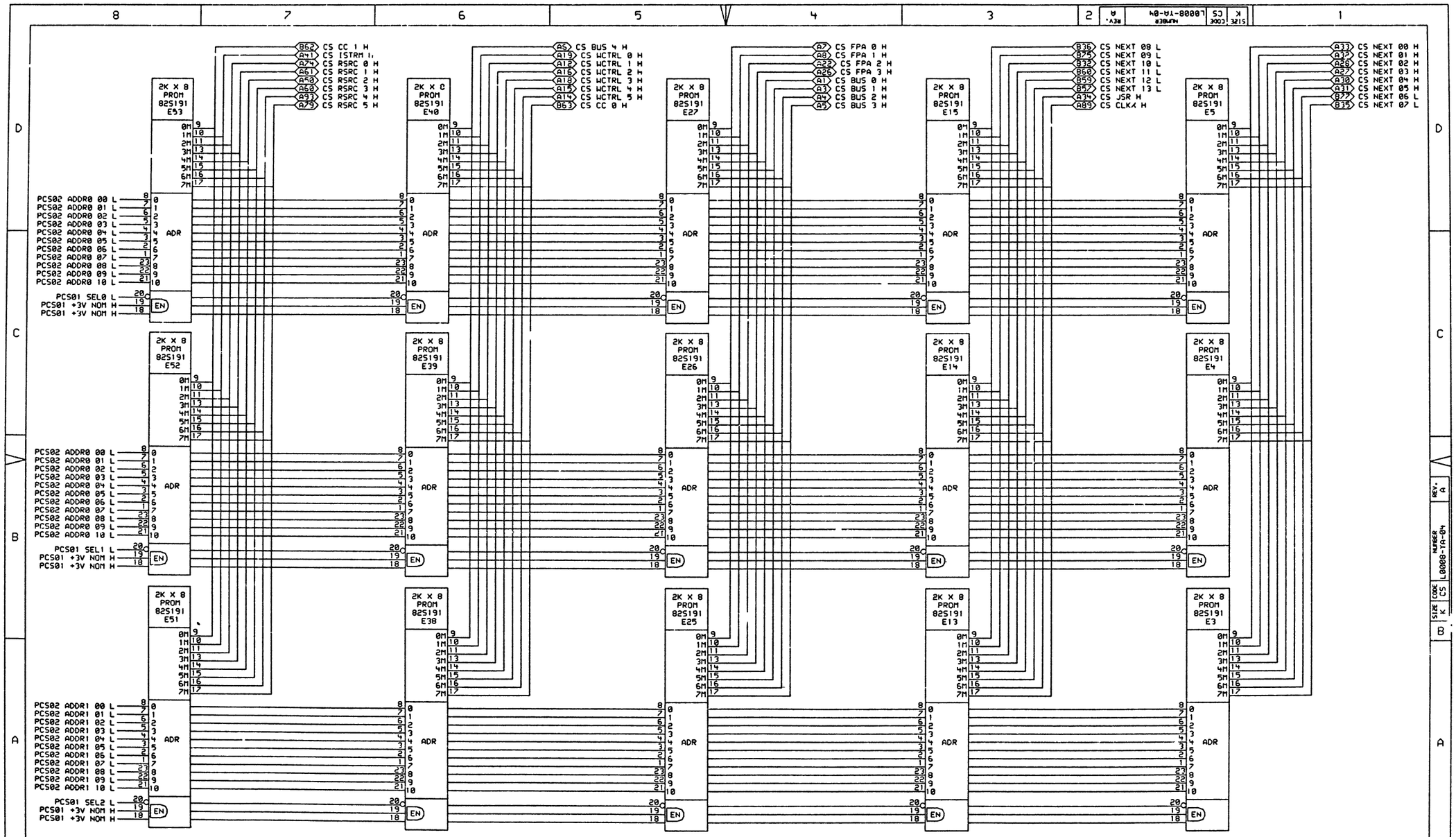
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

TITLE: PCS03 PROM ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-03	A

SIZE K | CODE CS | NUMBER L0008-YA-03 | REV. A



REVISIONS		
CHK	CHANGE NO.	REV

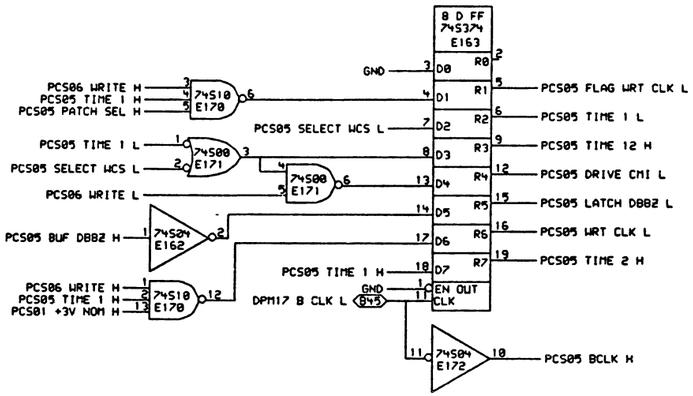
digital

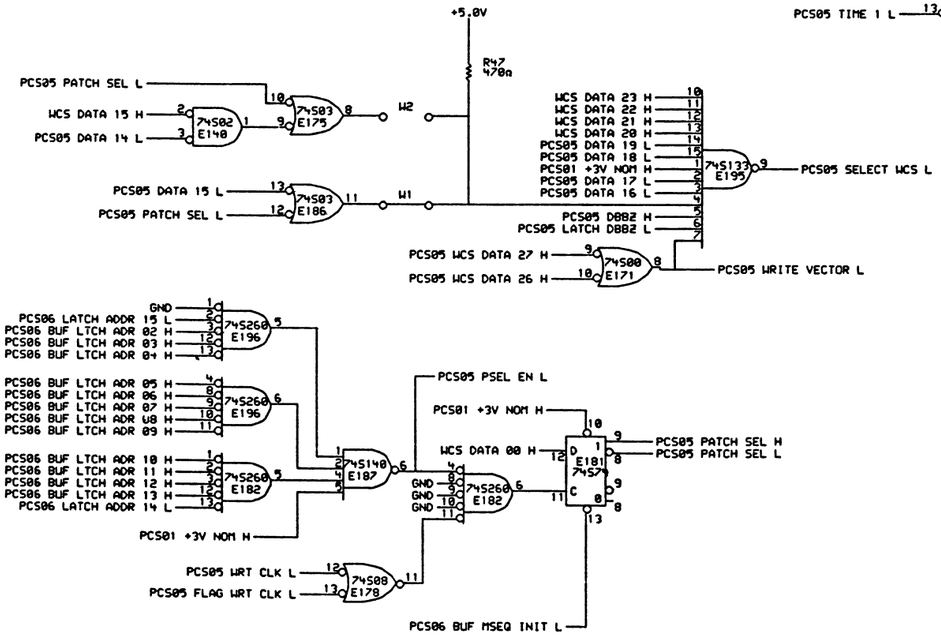
DRN. Timothy | DATE 18-JUN-84 | ENG. | DATE | TITLE: PCS04 PROM ARRAY

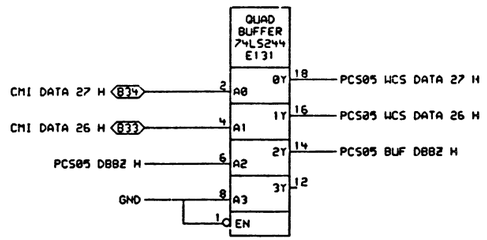
CHK'D. | DATE | BOARD LOCATION: | SHEET 1 OF 1

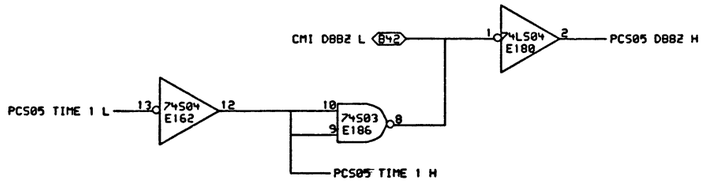
DSKD:<PLOURDE>PCYA04.DRW 18-APR-84 08:48 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0 | FIRST USED ON OPTION/MODEL:

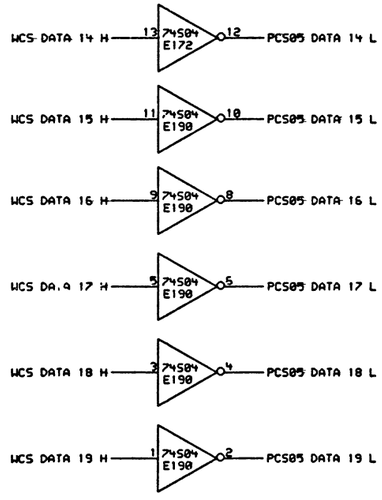
SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-04	A

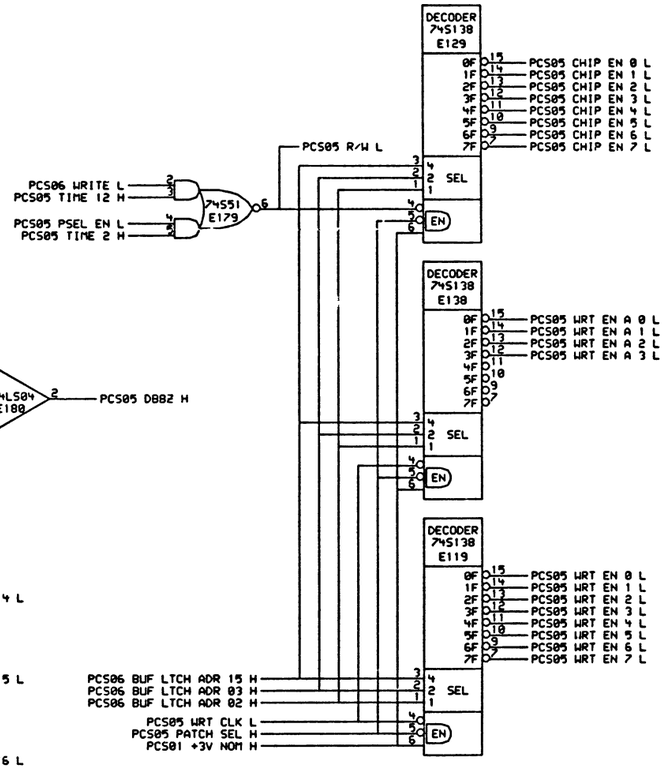


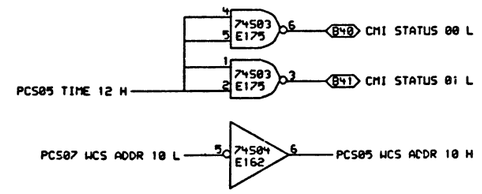












digital

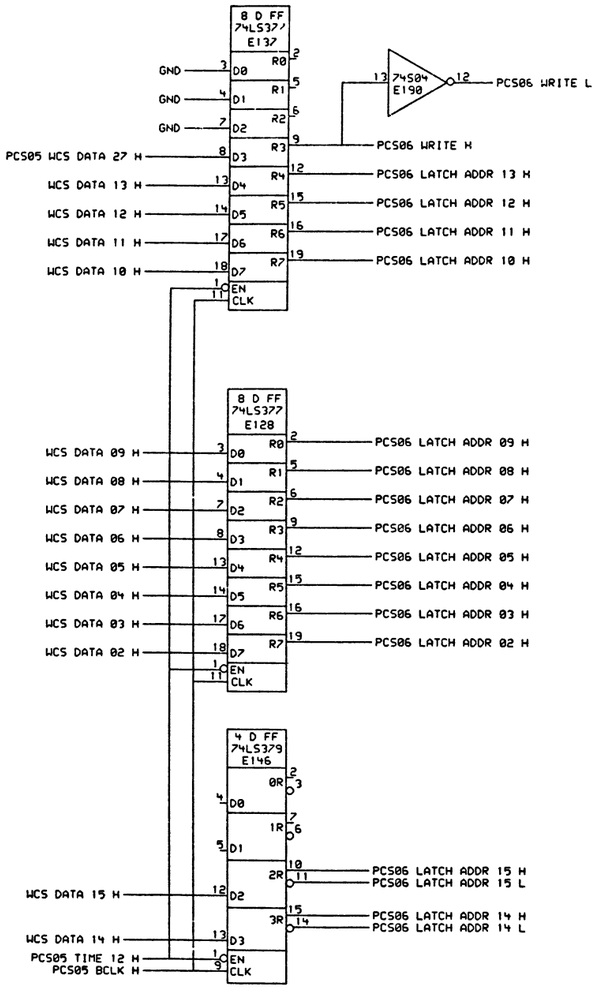
DRN: S. Landy | DATE: 11-MAR-85 | ENG. | DATE | TITLE: PCS05 CONTROL LOGIC

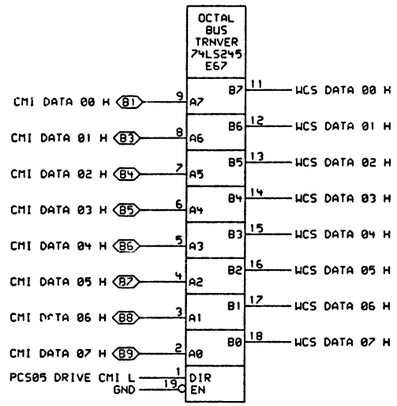
CHK: D. | DATE | BOARD LOCATION: | SHEET 1 OF

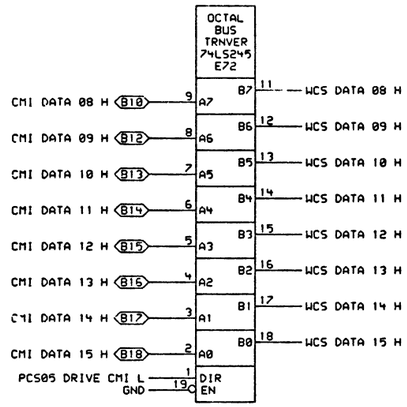
DSKD:<PLOURDE>PCYA05.DRW;13-JUL-84 08:38 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

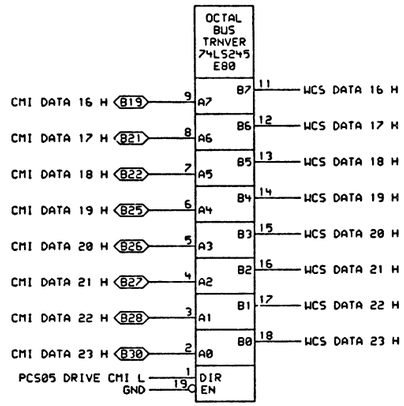
FIRST USED ON OPTION/MODEL:

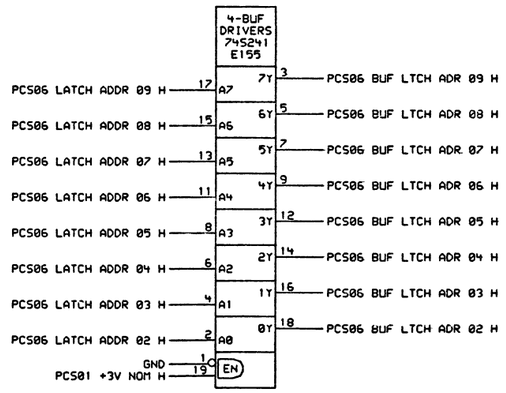
SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-05	B

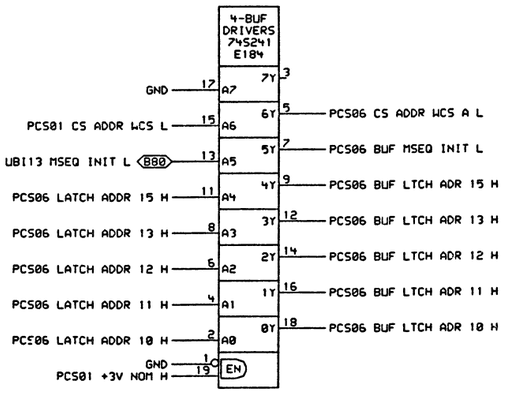












REVISIONS		
CHK	CHANGE NO.	REV

digital

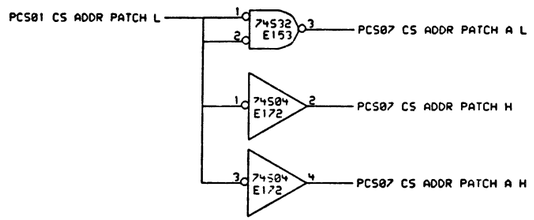
DRN. S.Toosky 18-JUN-84 | ENG. | DATE
CHK D. | DATE | BOARD LOCATION: | SHEET 1 OF 1

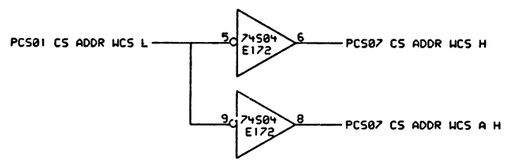
DSKD:<PLOURDE>PCYA06.DRW 18-APR-84 08:50 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0 | FIRST USED ON OPTION/MODEL:

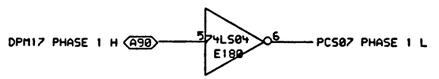
TITLE: PCS06 CONTROL LOGIC

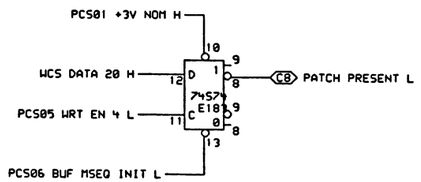
SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-06	A

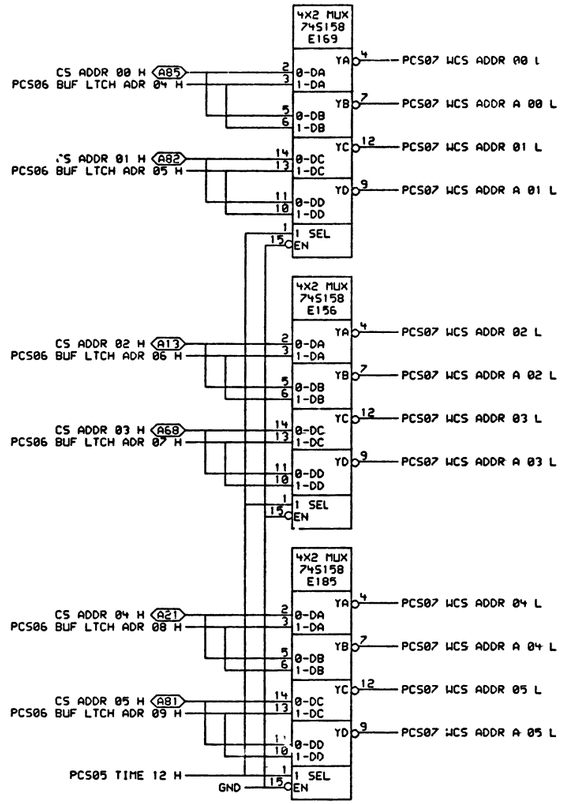
SIZE K | CODE CS | NUMBER L0008-YA-06 | REV. A

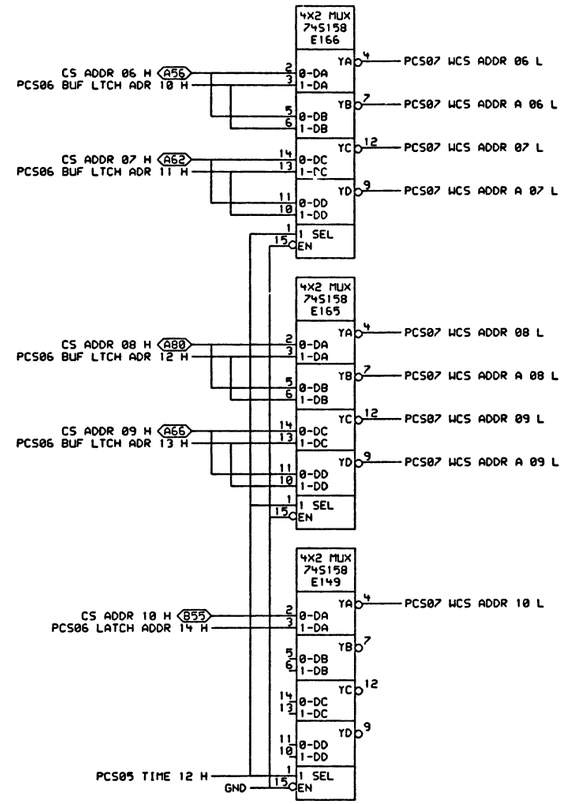












REVISIONS		
CHK	CHANGE NO.	REV

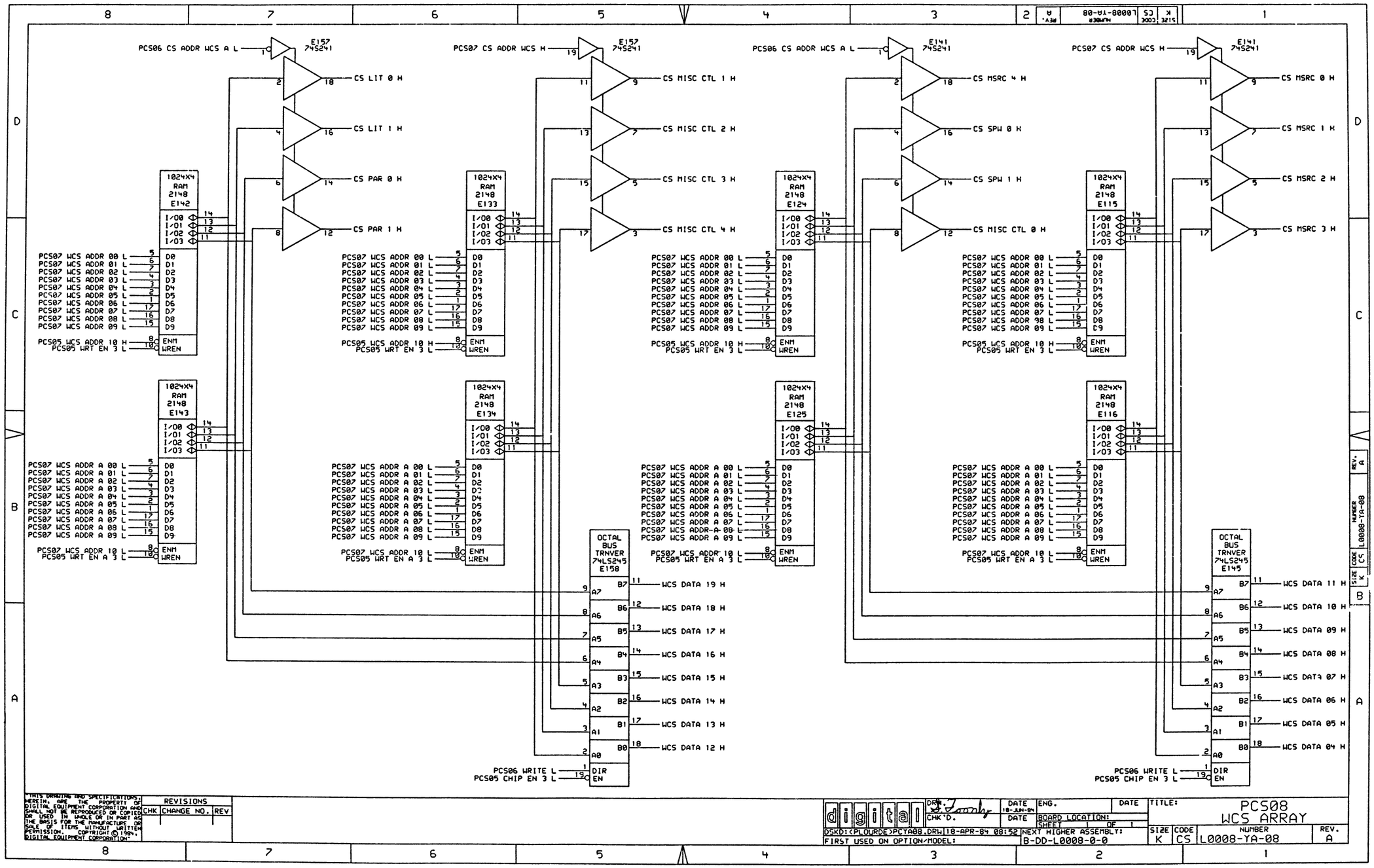
digital

DRN. S. Tansky
CHK D.
DATE 18-JUN-84
DATE
ENG.
DATE
BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCYA07.DRW 18-APR-84 08:51
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS07 CMI TRANCEIVERS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-07	A

SIZE K | CODE CS | NUMBER L0008-YA-07 | REV. A



REVISIONS		
CHK	CHANGE NO.	REV

digital

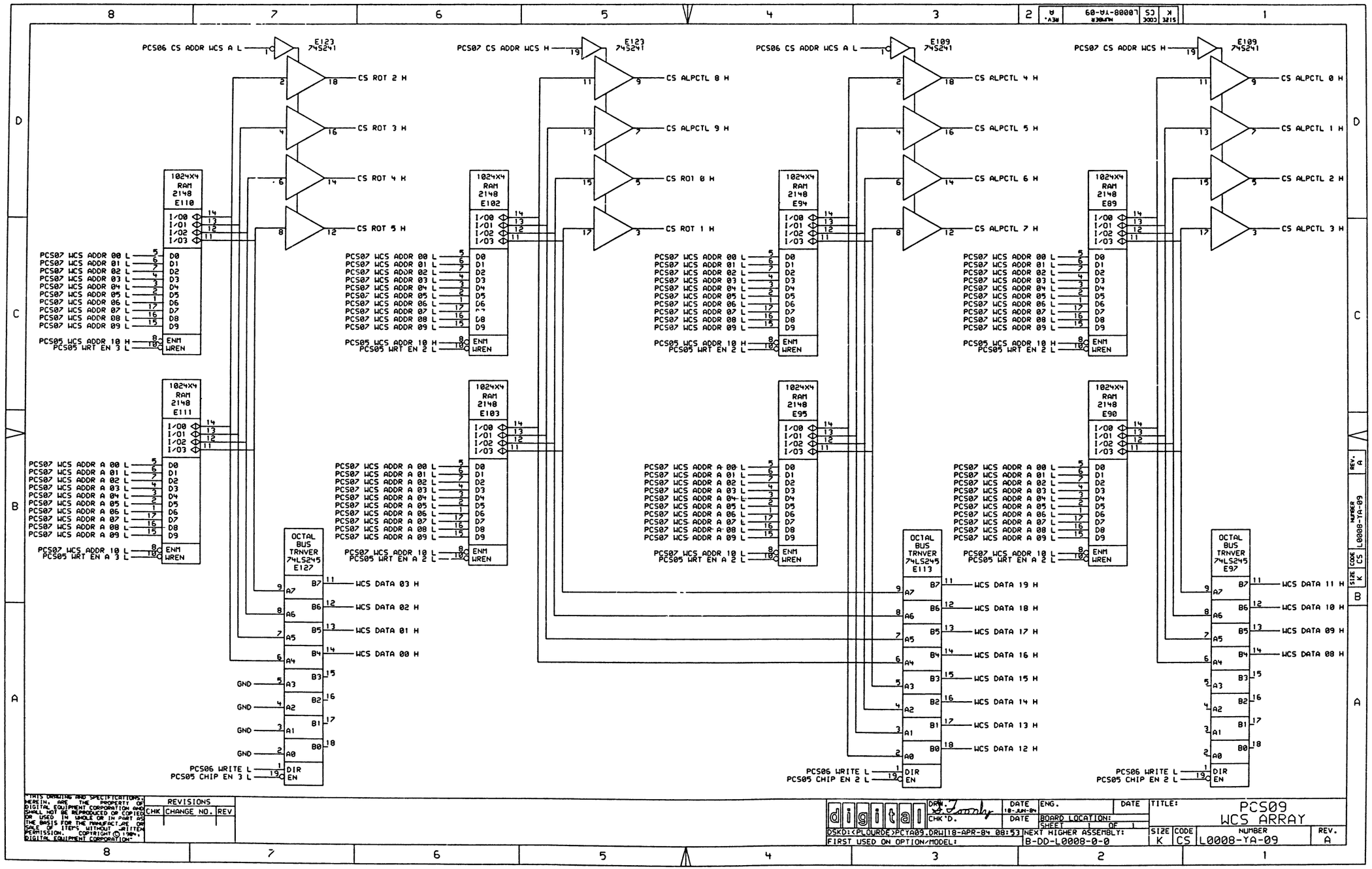
DSKO:<PLOURDE>PCTA08.DRW 18-APR-84 08:52

DRN: D. Landry
CHK'D.
DATE 18-JUN-84
ENG.
DATE
DATE
BOARD LOCATION:
SHEET 1 OF 1
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS08 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-08	A

REV. A
NUMBER L0008-YA-08
SIZE K CODE CS
B



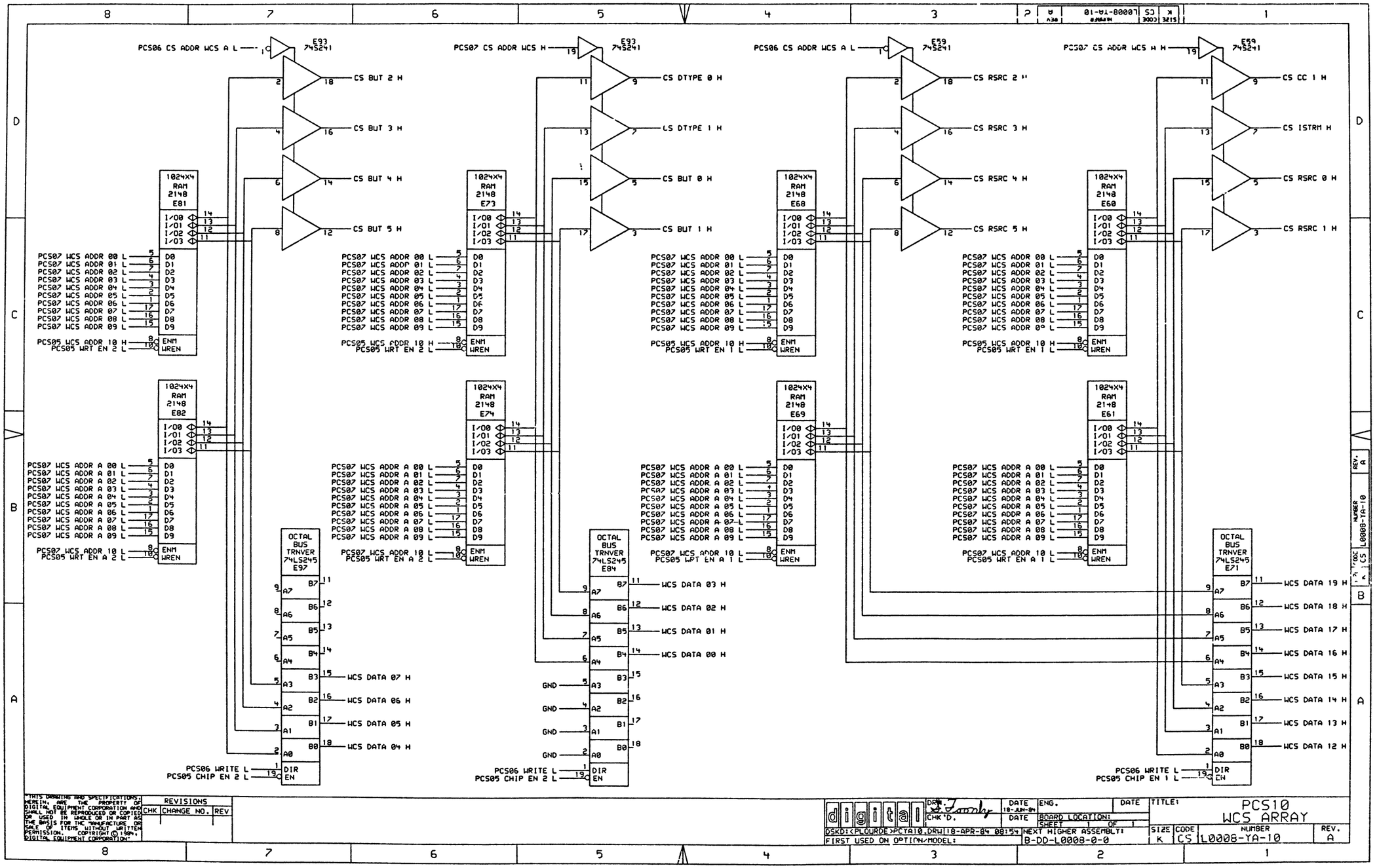
REVISIONS		
CHK	CHANGE NO.	REV

digital	DRN. Tommy	DATE 18-JUN-84	ENG.
	CHK'D.	DATE	DATE
DSKD:<PLOURDE>PCTA09.DRW 18-APR-84 08:53		BOARD LOCATION: SHEET 1 OF 1	
FIRST USED ON OPTION/MODEL:		NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0	

TITLE: PCS09 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-09	A

REV. A
NUMBER L0008-YA-09
SIZE K CODE CS



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REVISIONS		
CHK	CHANGE NO.	REV

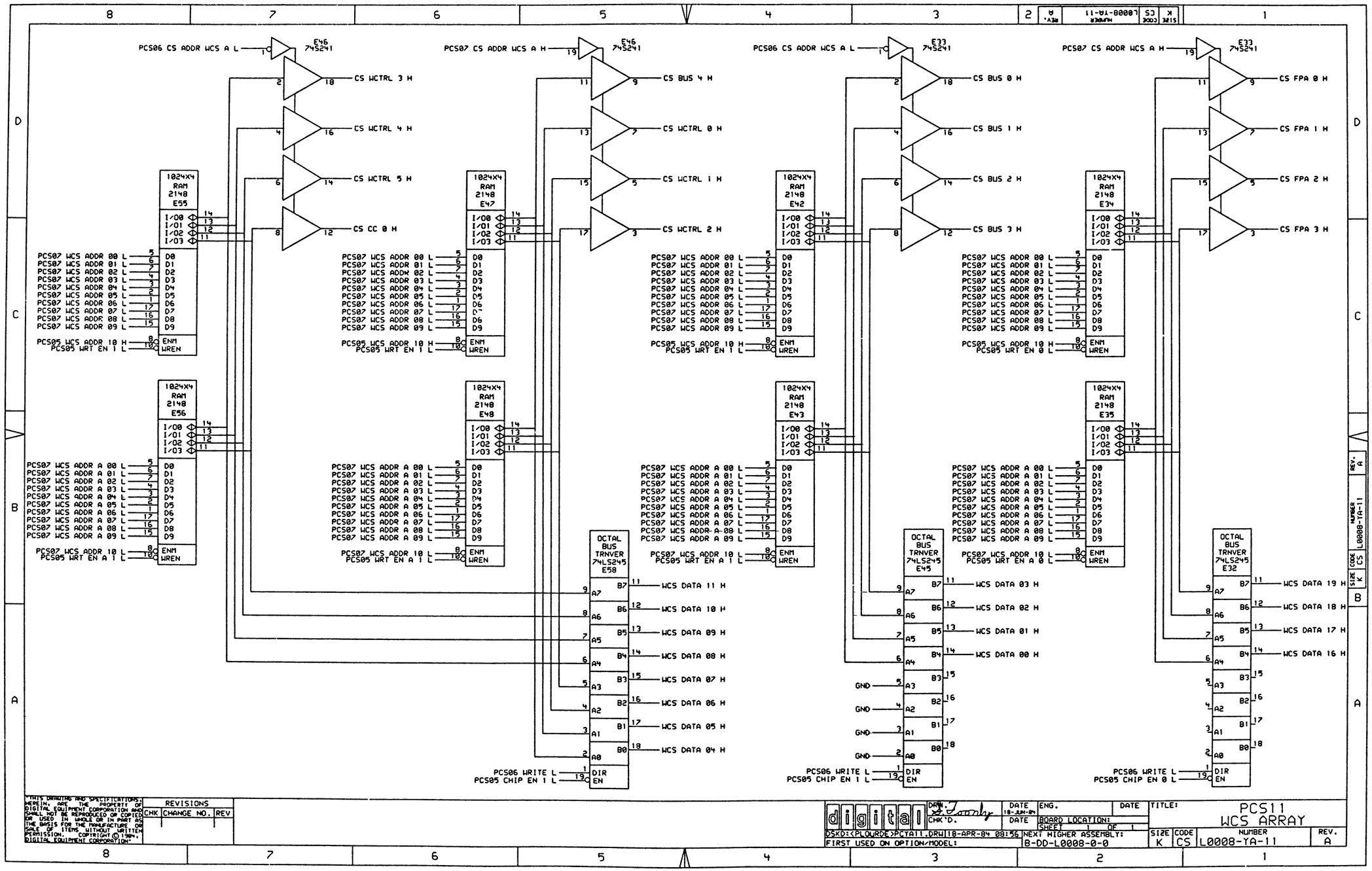
digital

DRN: S. Landry — DATE: 18-JUN-84 — ENG. — DATE
CHK'D. — DATE — BOARD LOCATION: — SHEET 1 OF 1

DSKD:<PLOURDE>PCTA10.DRW|18-APR-84 08:54 — NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS10 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-10	A



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. S. Gormley — DATE 18-JUN-84 — ENG. — DATE

CHK'D. — DATE — BOARD LOCATION:

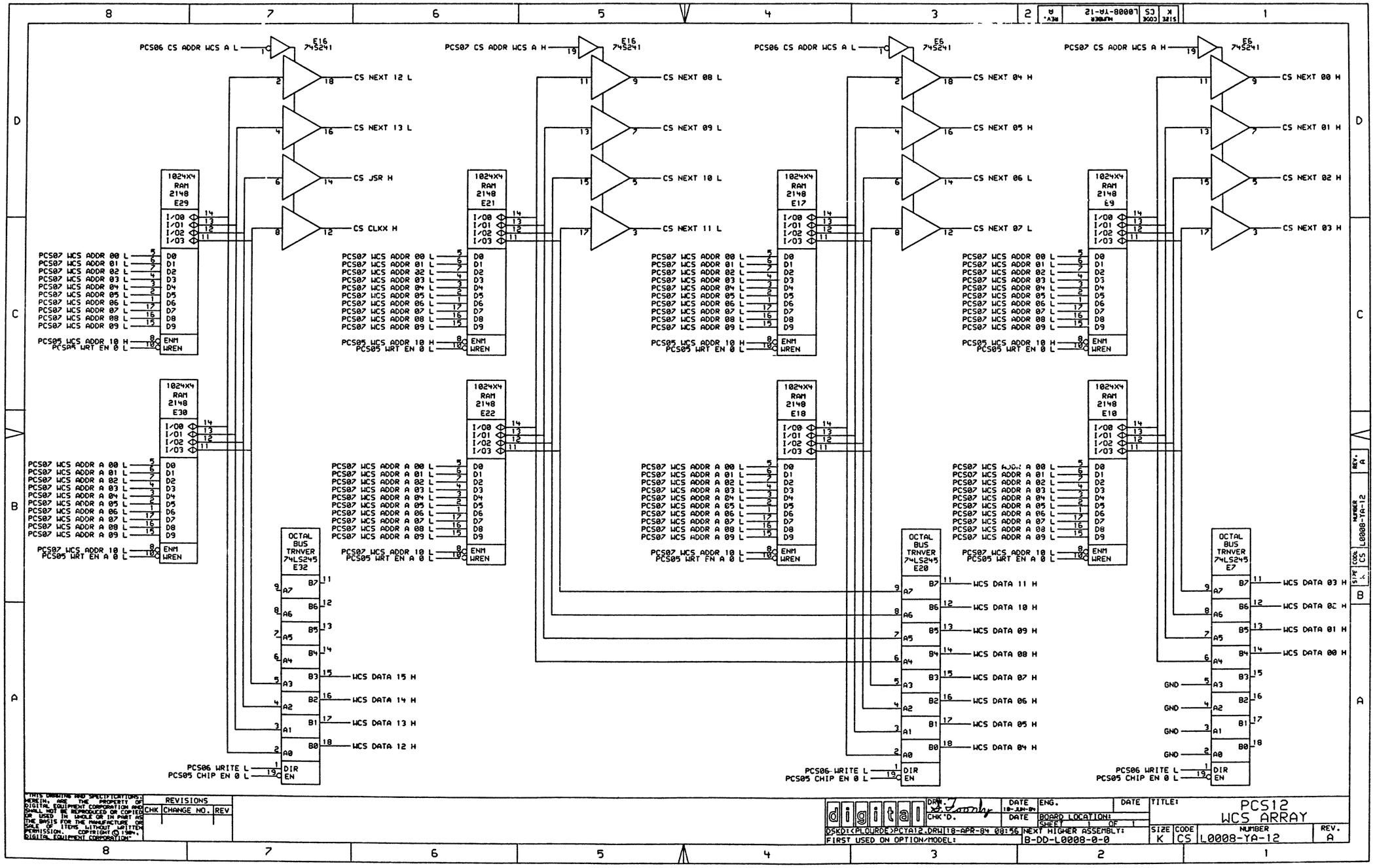
SHEET OF 1

DSKD:<PLOURDE>PCYA11.DRW|18-APR-84 08:56 — NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

TITLE: PCS11 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-11	A



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. [illegible] DATE 18-JUN-84 ENG. DATE

CHK'D. DATE BOARD LOCATION: SHEET 1 OF 1

DSKD:<PLOURDE>PCYA12.DRW|18-APR-84 08:56 NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

TITLE: PCS12 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-12	A

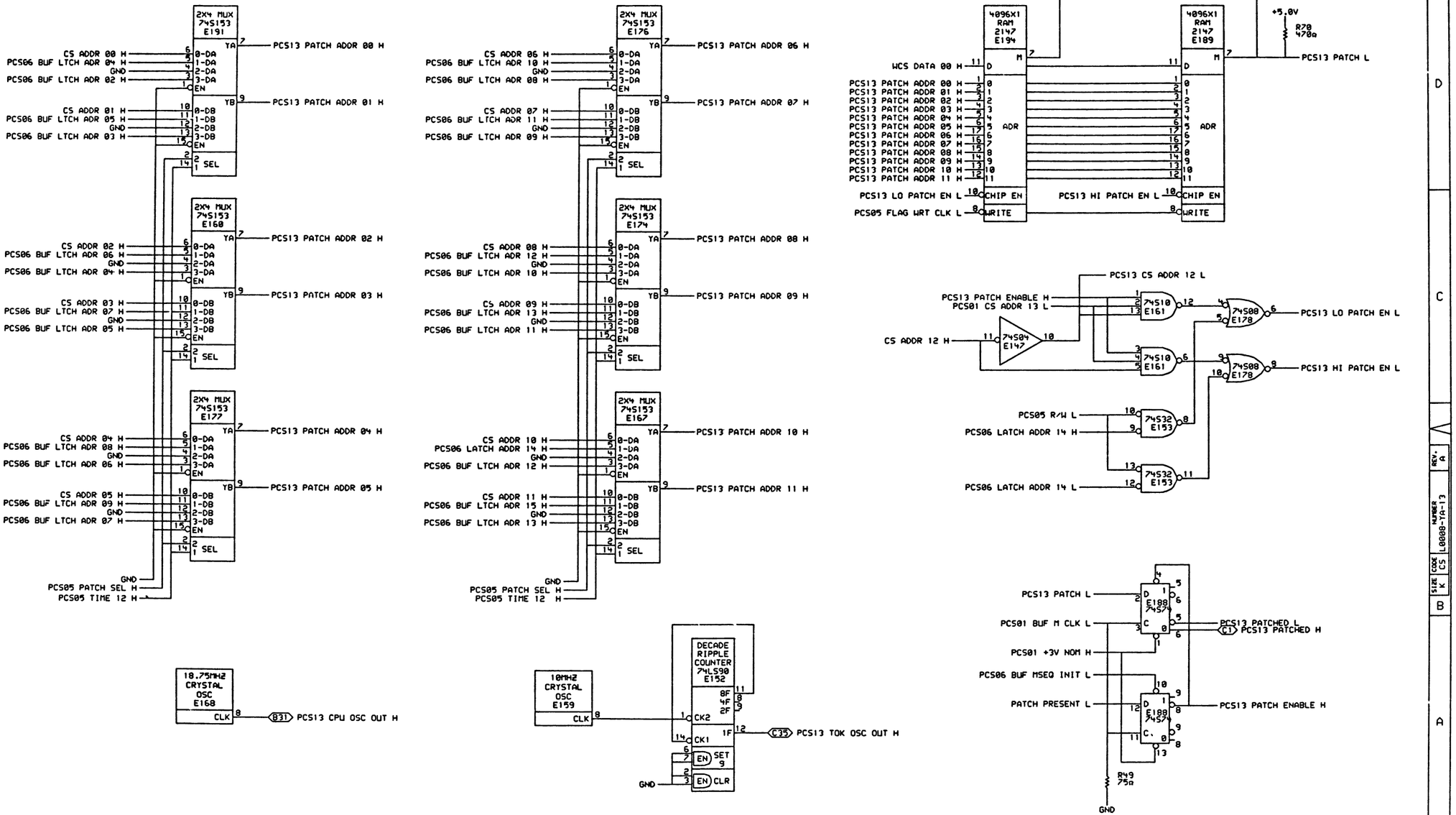
REV. A

NUMBER L0008-YA-12

SIZE K CODE CS

B

A

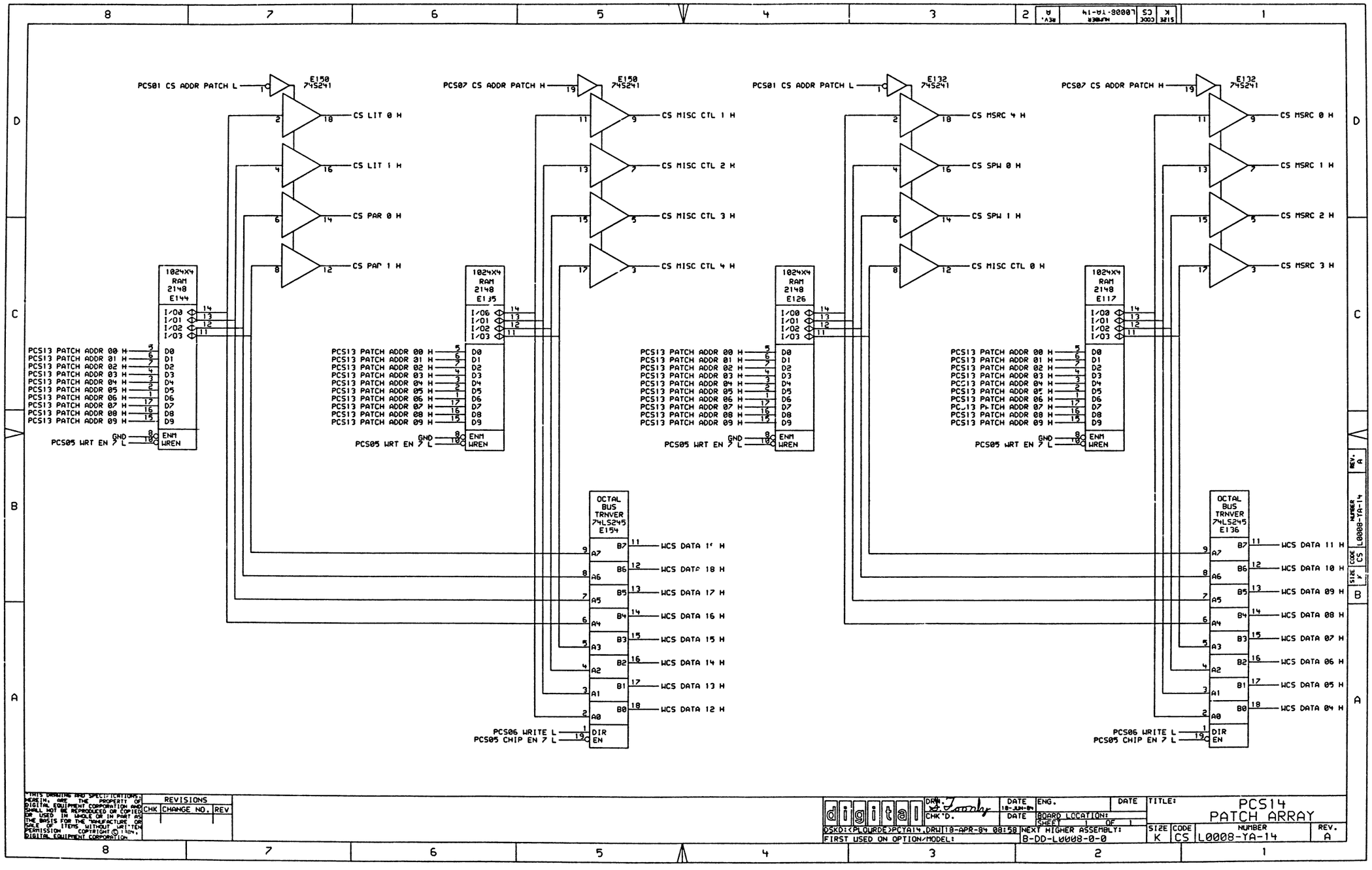


REVISIONS		
CHK	CHANGE NO.	REV

DRN: G.Tansky	DATE: 18-JUN-84	ENG.	DATE
CHK: D.	DATE	BOARD LOCATION: SHEET 1 OF 1	
OSKD:<PLOURDE>PCYA13.DRW;19-APR-84 09:14	NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0		
FIRST USED ON OPTION/MODEL:			

TITLE: PCS13 PATCH ADDRESS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-13	A



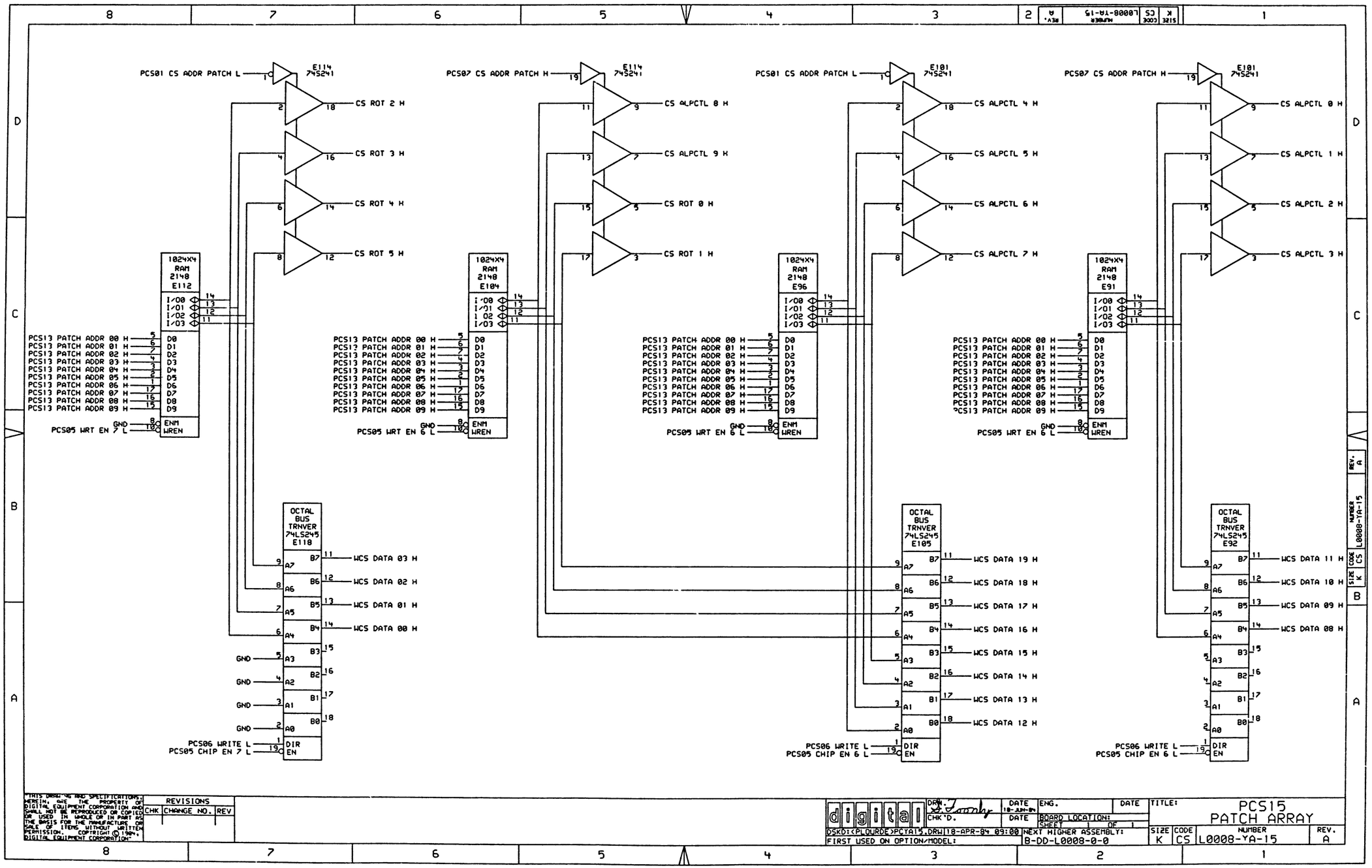
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. J. Landry 18-JAN-84
CHK'D.
ENG. DATE
DATE
BOARD LOCATION:
SHEET 1 OF 1
OSKO:<PLOURDE>PCYA14.DRW;18-APR-84 08:58
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS14 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-14	A



REVISIONS		
CHK	CHANGE NO.	REV

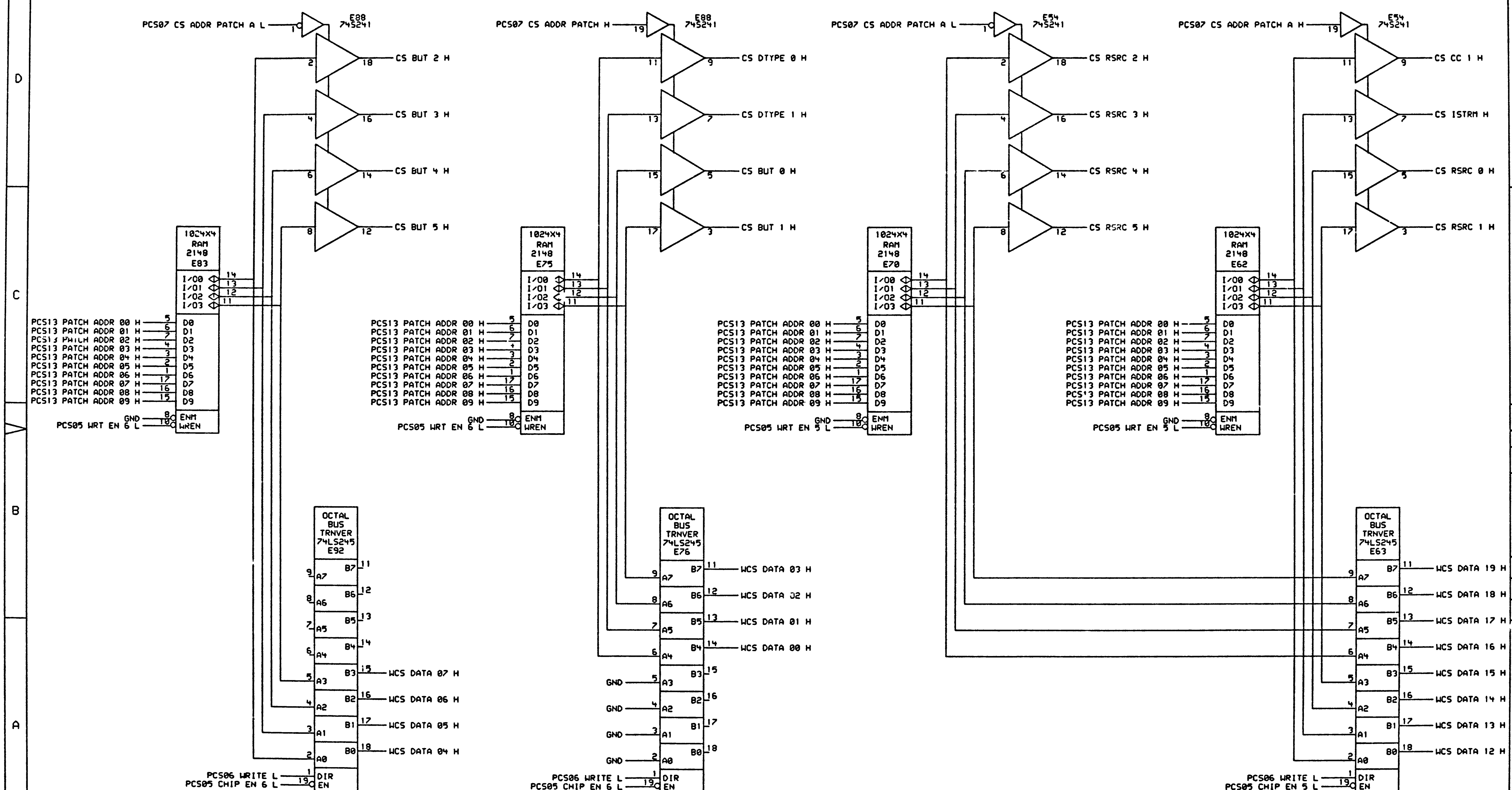
digital

DRN. L. Landry — DATE 18-JUN-84 — ENG. — DATE
CHK 'D. — DATE — BOARD LOCATION: — SHEET 1 OF 1

DSKD:<PLOURDE>PCTA15.DRW 18-APR-84 09:00 — NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS15 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-15	A



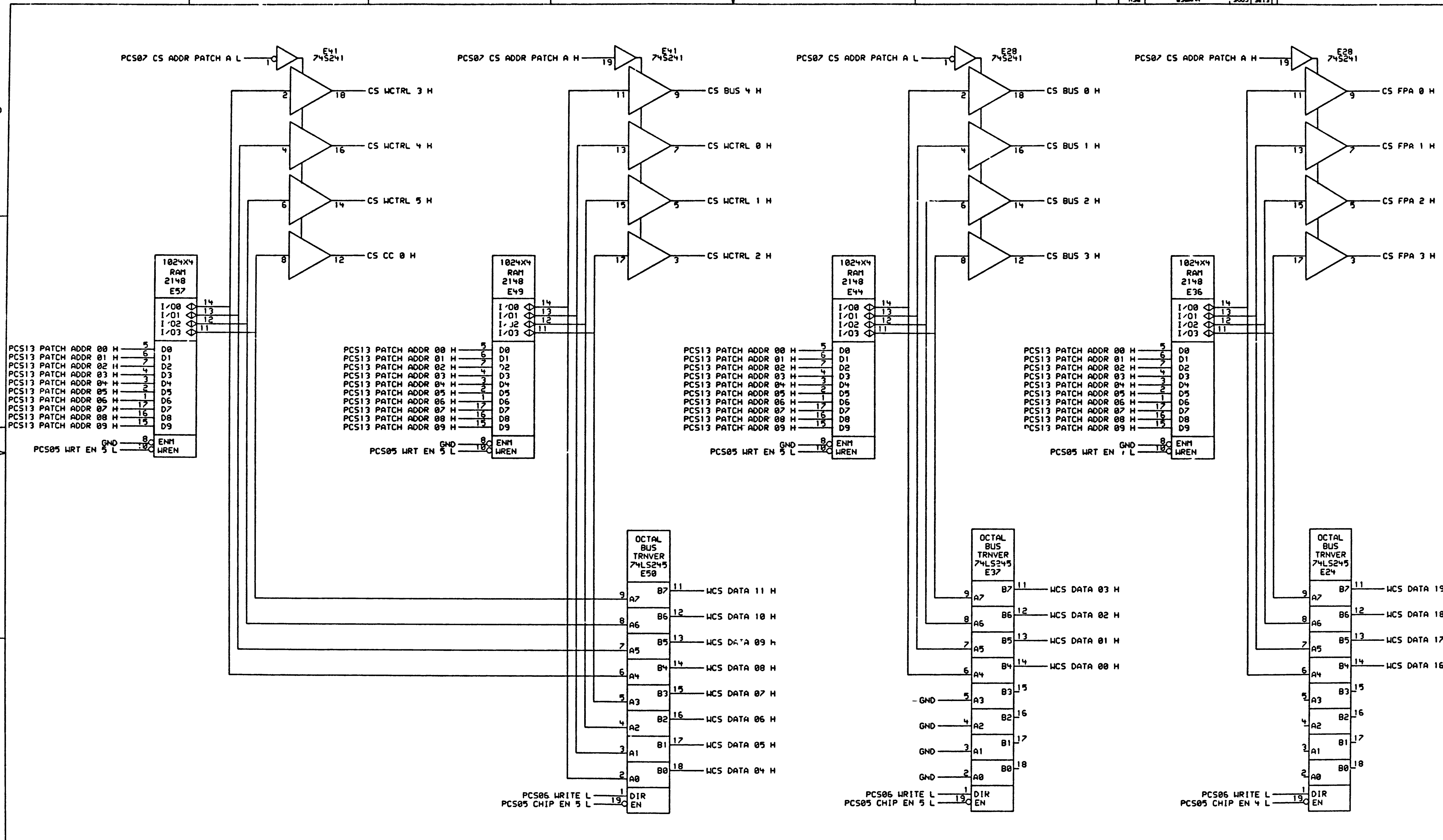
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. DATE 18-JUN-84 ENG. DATE
CHK'D. DATE BOARD LOCATION: SHEET 1 OF 1
DSKD:<PLOURDE>PCTA16.DRW;18-APR-84 09:01 NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS16 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-16	A



REVISIONS		
CHK	CHANGE NO.	REV

digital

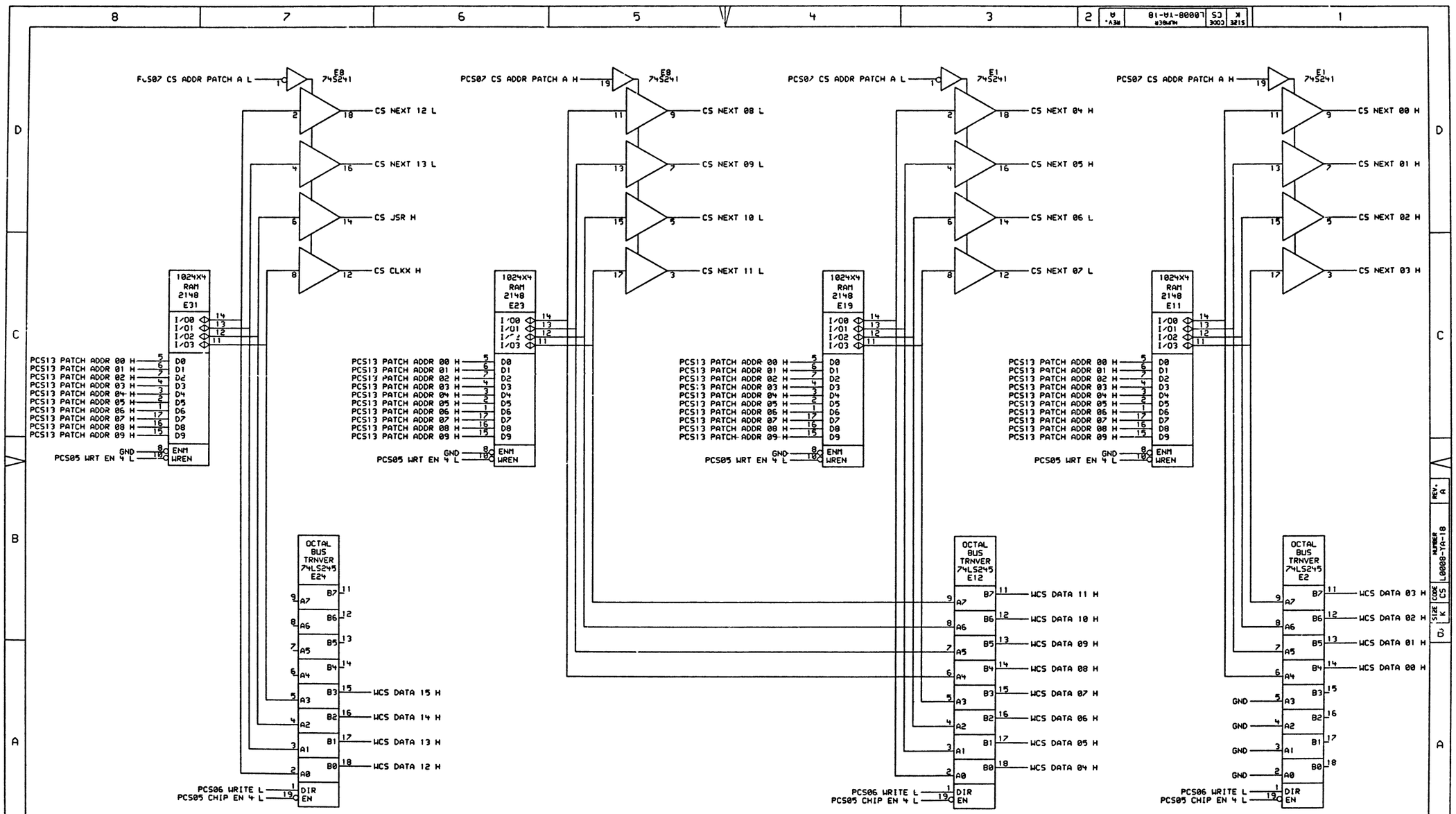
DRN	DATE 18-JUN-84	ENG.	DATE	TITLE: PCS17 PATCH ARRAY
CHK'D.	DATE	BOARD LOCATION: SHEET 1 OF 1		

DSKD:<PLOURDE>PCTA17.DRW|18-APR-84 09:02

NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-17	A



REVISIONS		
CHK	CHANGE NO.	REV

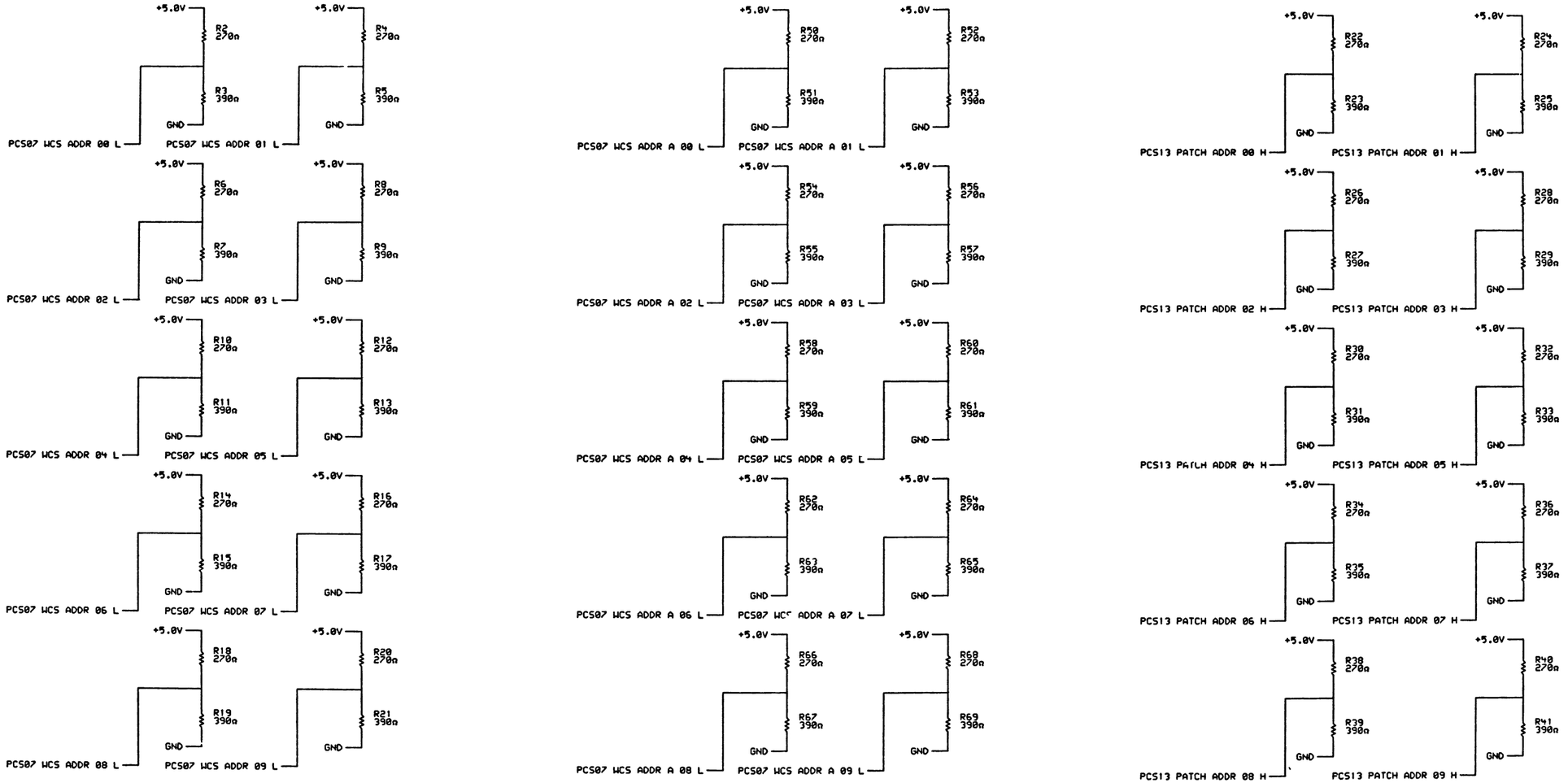
digital

DRN: C-4K-D. | DATE: 18-JAN-84 | ENG. | DATE | BOARD LOCATION: | SHEET 1 OF 1

DSKD:<PLOURDE>PCYA18.DRW;18-APR-84 09:03 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0 | FIRST USED ON OPTION/MODEL:

TITLE: PCS18 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-18	A



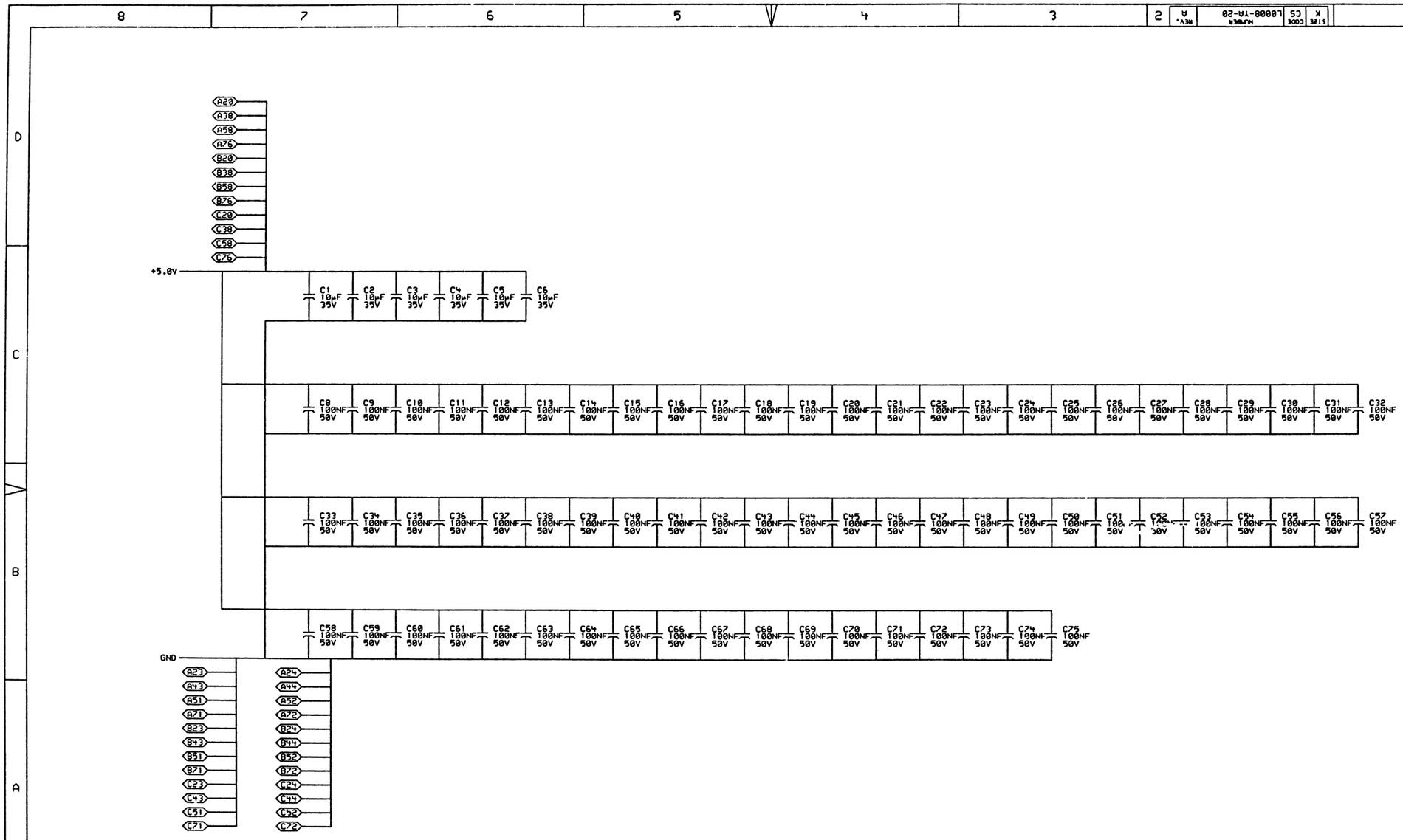
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN: J. Crowley — DATE: 18-JAN-84
CHK'D: — DATE:
ENG: — DATE:
BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCTA19.DRW|18-APR-84 09:04
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS19 TERMINATORS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YA-19	A



REVISIONS		
CHK	CHANGE NO.	REV

DRN.		DATE 18-APR-84	ENG.
CHK'D.		DATE	BOARD LOCATION:
DSKD:<PLOURDE>PCYA20.DRW;18-APR-84 09:05		NEXT HIGHER ASSEMBLY:	SHEET 1 OF 1
FIRST USED ON OPTION/MODEL:		B-DD-L0008-0-0	

DATE	TITLE: PCS20			
	SIZE	CODE	NUMBER	REV.
	K	CS	L0008-YA-20	A

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YB	E

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
		L0008-YB	PARTS REVISION	A1 A2 B1 B2 C1 C2 D2
E-MD-5015549-0-0	7		DRILL AND ETCH DRAWING	A B B B B B B
		5015549-0	ETCH BOARD	B B B B B B B
E-UA-L0008-0-YB	1		UNIT ASSEMBLY	A A A A B B C
E-EC-5015549-YB	2		ETCH CUT L0008-YB	A A A A B B C
K-PL-L0008-0-DBP	3		PARTS LIST	A A B B B B C
K-PC-L0008-0-DBI	–		P.C. DATABASE	B B B B B B B
K-CS-L0008-YB-01	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-02	1		SCHEM^TIC	A A A A A A A
K-CS-L0008-YB-03	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-04	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-05	1		SCHEMATIC	A A A A A A B
K-CS-L0008-YB-06	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-07	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-08	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-09	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-10	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-11	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-12	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-13	1		SCHEMATIC	A A A A B B B
K-CS-L0008-YB-14	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-15	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-16	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-17	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-18	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-19	1		SCHEMATIC	A A A A A A A

NOTES:

REVISIONS							
REV.		B	C	C	D	D	E
CHG NO.		TW001	TW002	TW002	TW003	TW003	TW004
DATE		7-83	11-83	11-83	11-83	11-83	7-84

digital

USED ON OPTION/MODEL		DRN. DiFOURNIER	5-8-84
		CHK'D	
		ENG.	
		PROD.	

TITLE PCS

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YB	E

SHEET 1 OF 2

DRB 128

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YB	E

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
K-CS-L0008-YB-20	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YB-DBS			DATA BASE	A A A A B B C

NOTES:

REVISIONS	REV.	CHG NO.	DATE
	B	TW001	7-83
	C	TW002	11-83
	C	TW002	11-83
	D	TW003	11-83
	D	TW003	11-83
	E	TW004	7-84

digital

USED ON OPTION/MODEL

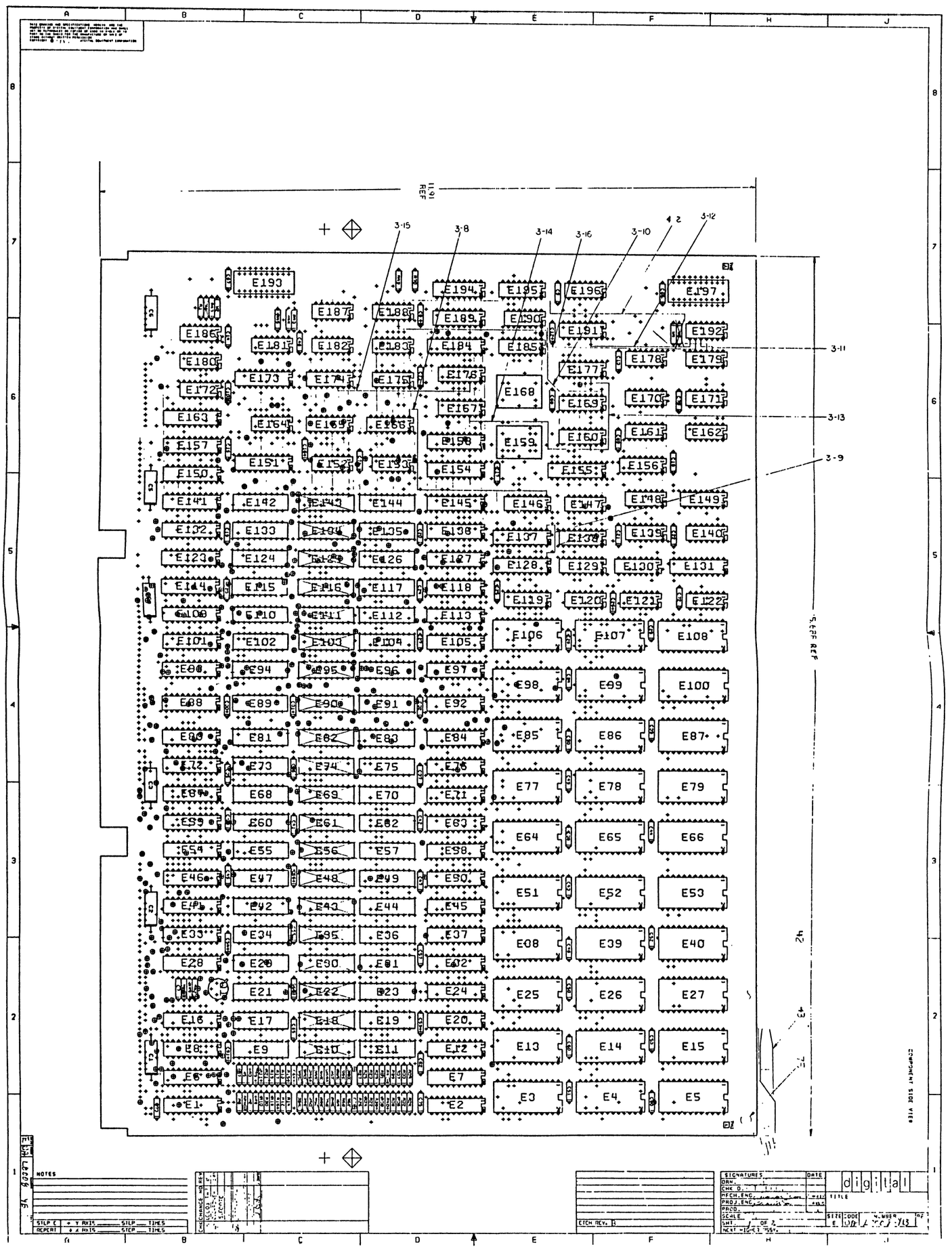
DRN.	D FOURNIER	5-8-84
CHK'D		
ENG.		
PROD.		

TITLE: PCS

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YB	E

SHEET 2 OF 2

DRB 128


11.91 REF
3-15
3-8
3-14
3-16
3-10
3-12
3-11
3-13
3-9
9.55 REF
E1 E2 E3 E4 E5
E6 E7 E8 E9 E10 E11 E12 E13 E14 E15
E16 E17 E18 E19 E20 E21 E22 E23 E24 E25 E26 E27
E28 E29 E30 E31 E32 E33 E34 E35 E36 E37 E38 E39 E40
E41 E42 E43 E44 E45 E46 E47 E48 E49 E50 E51 E52 E53
E54 E55 E56 E57 E58 E59 E60 E61 E62 E63 E64 E65 E66
E67 E68 E69 E70 E71 E72 E73 E74 E75 E76 E77 E78 E79
E80 E81 E82 E83 E84 E85 E86 E87
E88 E89 E90 E91 E92 E93 E94 E95 E96 E97 E98 E99 E100
E101 E102 E103 E104 E105 E106 E107 E108
E109 E110 E111 E112 E113 E114 E115 E116 E117 E118 E119 E120 E121 E122
E123 E124 E125 E126 E127 E128 E129 E130 E131
E132 E133 E134 E135 E136 E137 E138 E139 E140
E141 E142 E143 E144 E145 E146 E147 E148 E149
E150 E151 E152 E153 E154 E155 E156
E157 E158 E159 E160 E161 E162
E163 E164 E165 E166 E167 E168 E169 E170 E171
E172 E173 E174 E175 E176 E177 E178 E179
E180 E181 E182 E183 E184 E185 E186 E187 E188 E189 E190 E191 E192
E193 E194 E195 E196 E197
digital
NOTES
SIGNATURES
DRN.
CHK'D.
TECH. ENG.
PROJ. ENG.
PROD.
SCALE
SIZE
CODE
NUMBER
REV
SHT. OF 2
NEXT ASSY
TITLE
ETCH REV. B
ECO CHANGE WORK
STEP C + Y AXIS STEP TIMES
REPEAT + X AXIS STEP TIMES

REWORK INSTRUCTIONS PER ECO # L0008-TW003
WIRE ADDS SIDE 1:

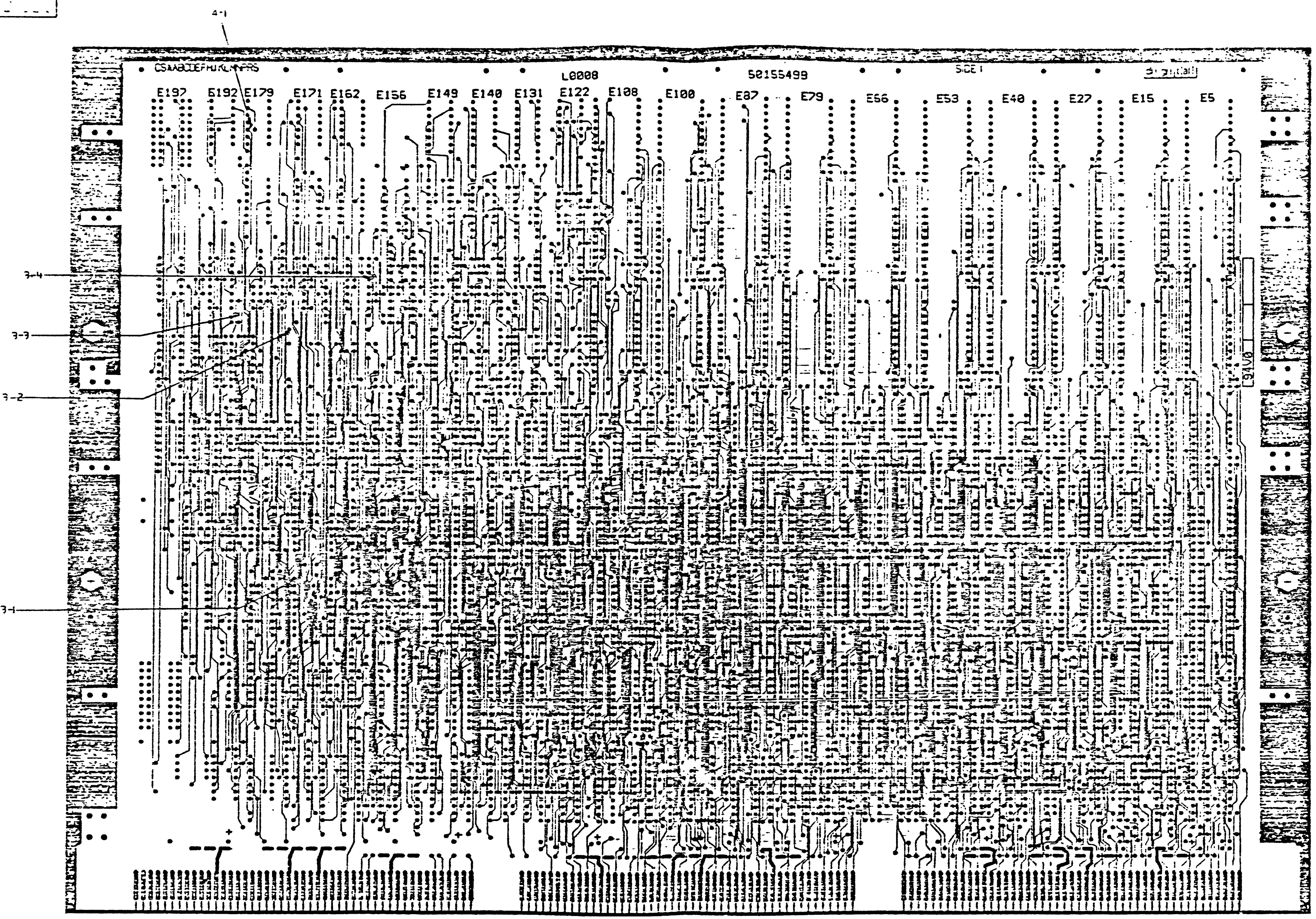
3-8 FROM E166-01 TO E146-01
3-9 FROM E137-01 TO E128-01
3-10 FROM E185-01 TO E169-01
3-11 FROM E179-03 TO E192-10
3-12 FROM E192-08 TO E191-14
3-13 FROM E177-14 TO E160-14
3-14 FROM E160-14 TO E167-14
3-15 FROM E174-14 TO E174-14
3-16 FROM E183-12 TO E192-09

REWORK INSTRUCTIONS ECO #4

WIRE ADDS SIDE 1:
4-2 FROM E179-4 TO E187-6

REVISION HISTORY
DATE | ECO NUMBER | REV

TITLE PCS
DOCUMENT NUMBER
SIZE E | CODE LA | LC008-0-YB | REV C
SCALE | SHEET



UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN
AND THE FOLLOWING TOLERANCES APPLY

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

REMOVE BURRS AND BREAK SHARP CORNERS

1-21-83
1-21-83

ETC-CUT DRAWING

digital

E EC 5015549-YS-0

1 OF 3

TITLE
ETCH CUT DRAWING

DOCUMENT NUMBER
E EC 501554445-0 C

2 OF 3

REWORK INSTRUCTIONS

ECO#3

ETCH CUTS SIDE 1

3-1 AT PTH ABOVE E174-16

3-2 CUT AT PTH ABOVE E168 PIN 1

3-3 AT E191-14

3-4 AT E180-14

ETCH CUTS SIDE 2

3-5 CUT ETCH DIRECTLY BELOW E160-1

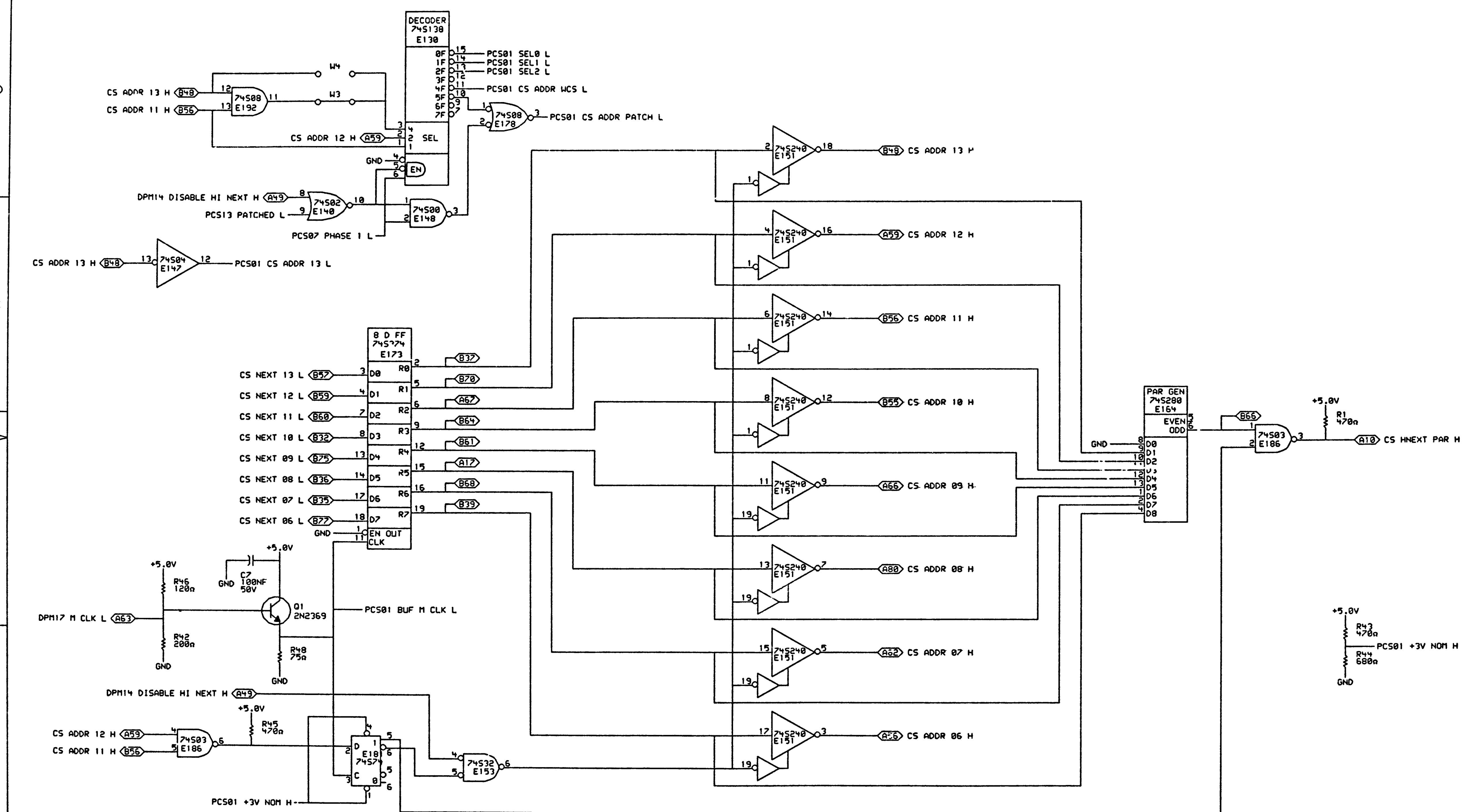
3-6 BETWEEN E167-14 AND PTH GOING TO THE LEFT

3-7 BETWEEN E177-14 AND PTH GOING TO THE LEFT

REWORK INSTRUCTIONS ECO #4

ETCH CUT SIDE 1:

4-1 BETWEEN E179-4 AND E179-5



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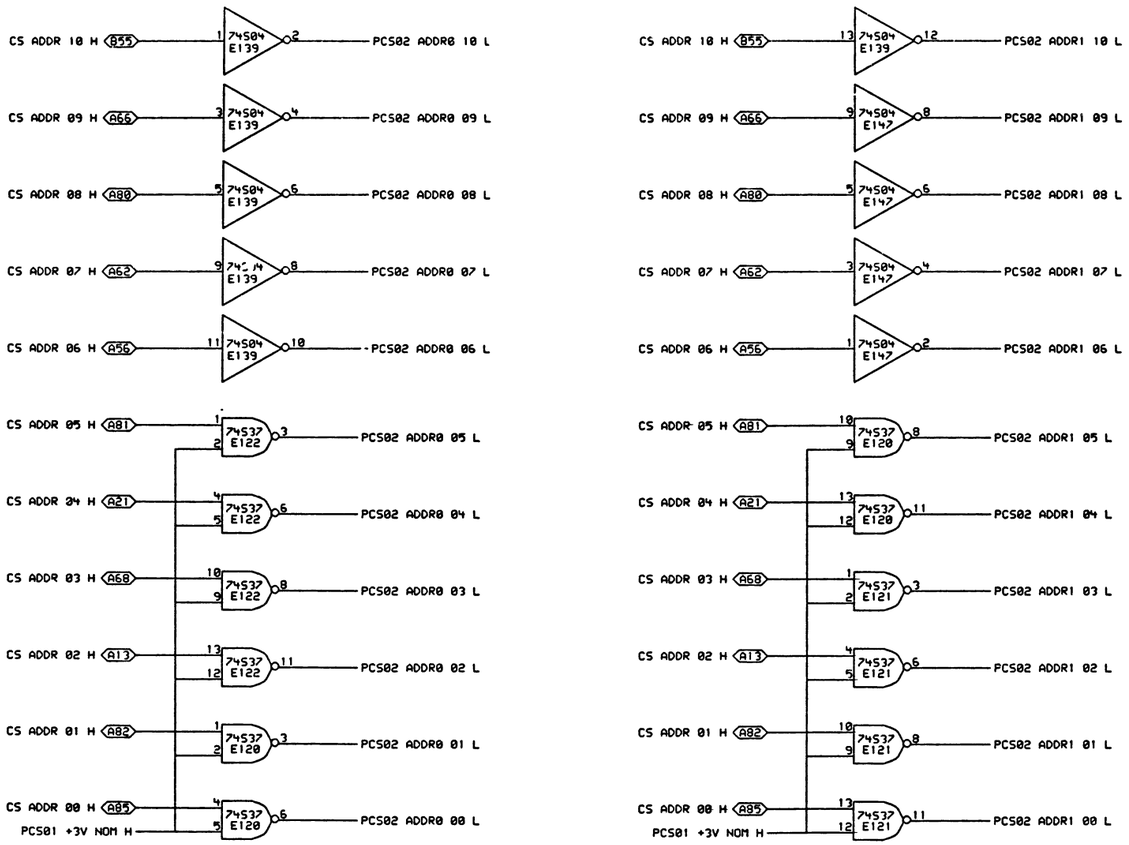
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. J. Toomby — DATE 18-JUN-84
CHK'D. — DATE
ENG. — DATE
BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCY801.DRW 18-APR-84 15:45
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS01 CS ADDR DECODE

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-01	A



REVISIONS		
CHK	CHANGE NO.	REV

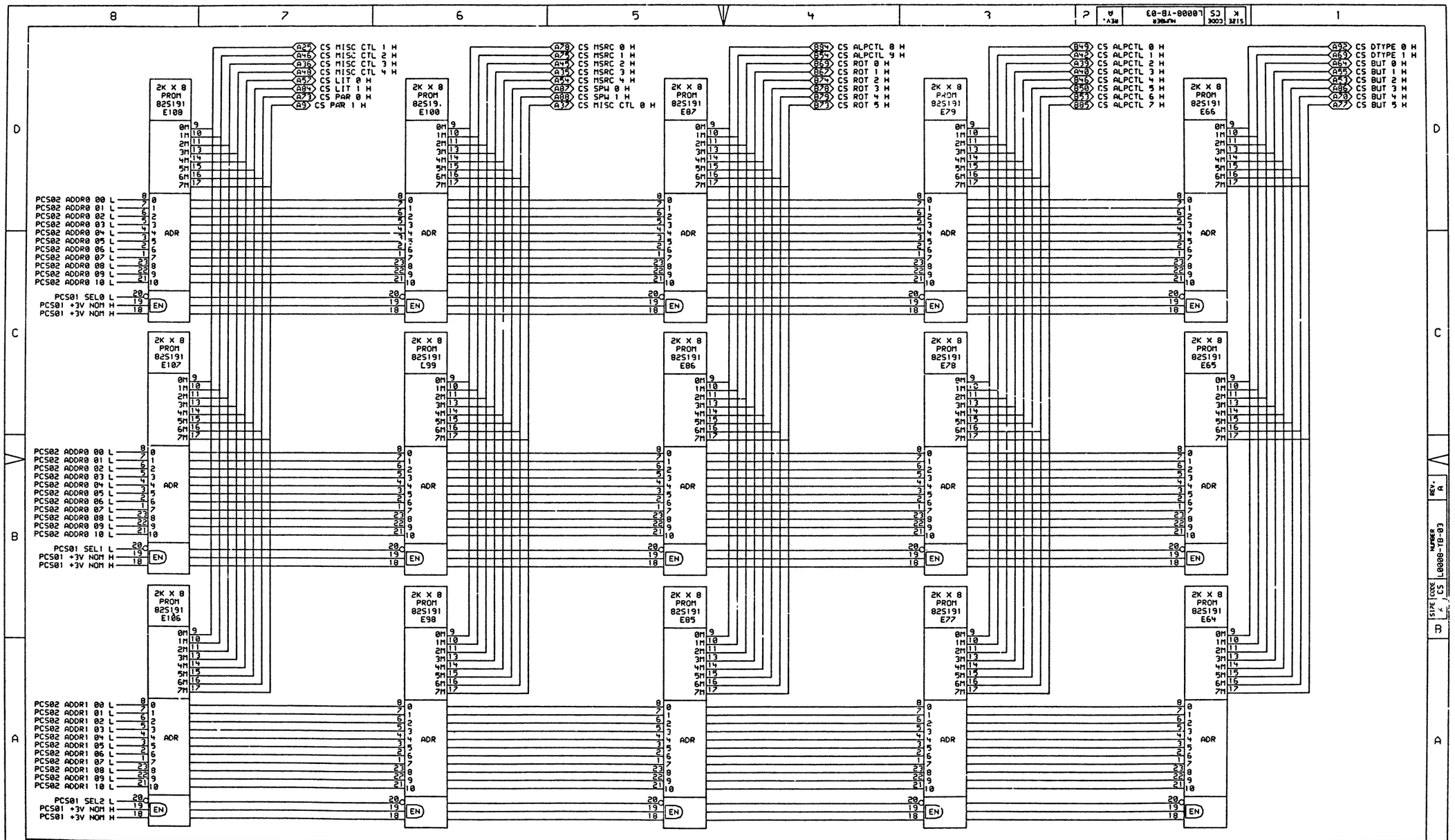
digital

DRN: J. Gormley DATE: 18-JUN-84
CHK'D. DATE
ENG. DATE
BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCYB02.DRW|18-APR-84 15:46
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS02 ADDRESS BUFFERS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-02	A

SIZE K | CODE CS | NUMBER L0008-YB-02 | REV. A



REVISIONS

CHK	CHANGE NO.	REV

digital

DRN. Tarnby
CHK'D.

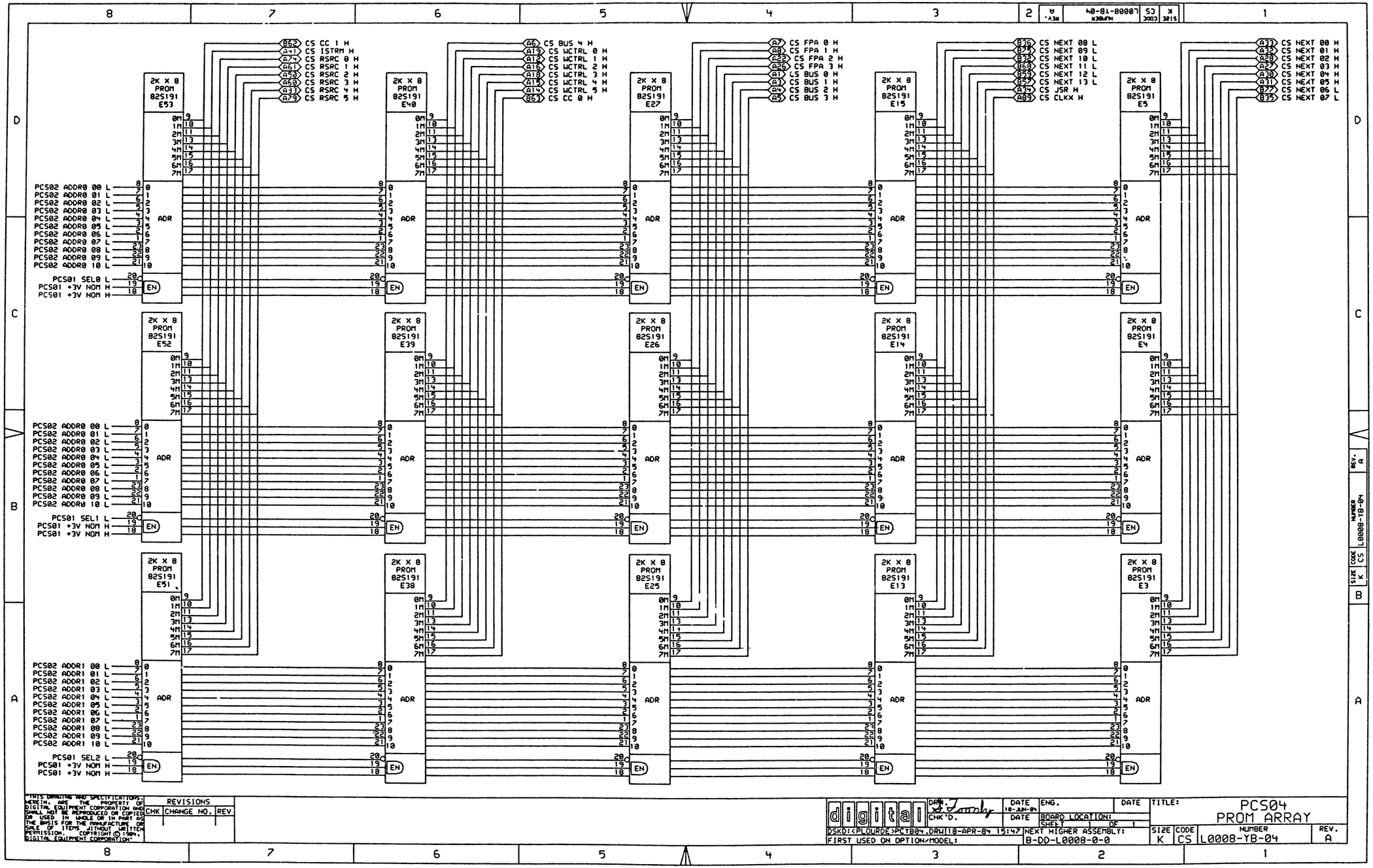
DATE 18-APR-84 | ENG. | DATE
DATE | BOARD LOCATION: | SHEET 1 OF 1

DSKD:<PLOURDE.PCYB03.DRW]18-APR-84 15:46
FIRST USED ON OPTION/MODEL:

NEXT HIGHER ASSEMBLY:
B-DD-L0008-0-0

TITLE: PCS03 PROM ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-03	A



REVISIONS		
CHK	CHANGE NO.	REV

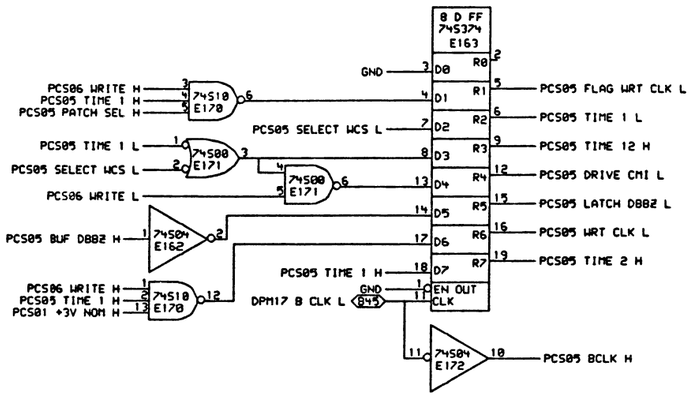
digital

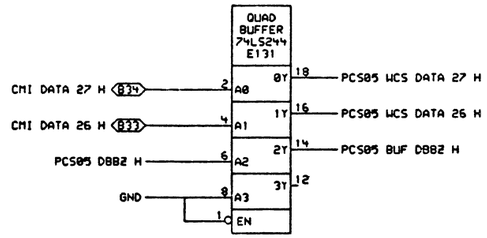
DRN: T.Toomby | DATE: 18-JUN-84 | ENG. | DATE
CHK'D. | DATE | BOARD LOCATION: | SHEET 1 OF 1

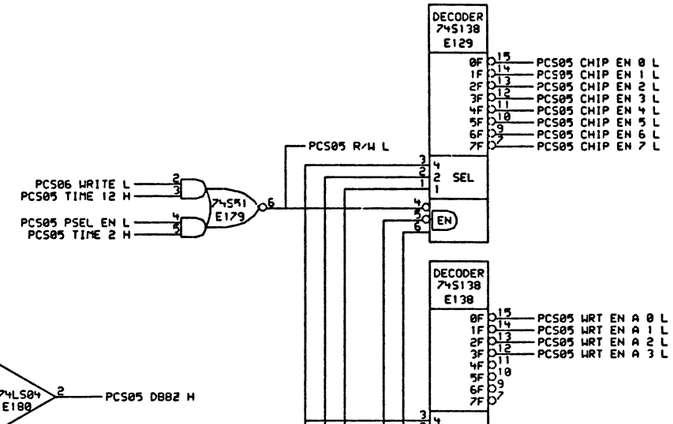
DSKD:<PLOURDE>PCT804.DRW;18-APR-84 15:47 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0 | FIRST USED ON OPTION/MODEL:

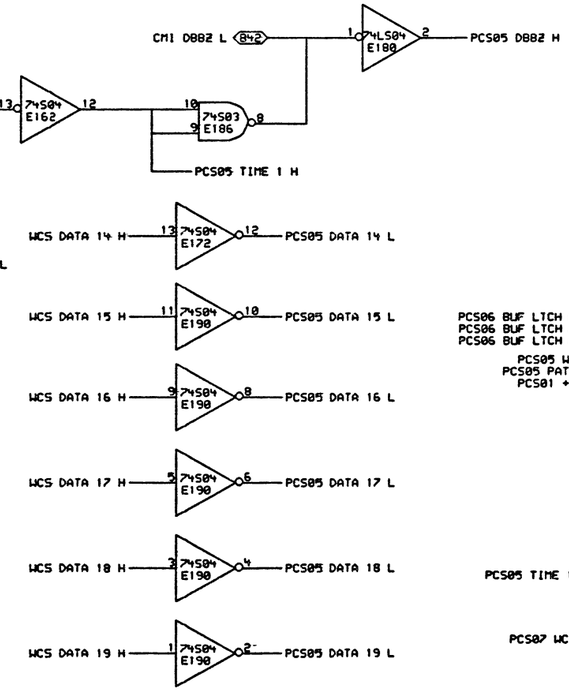
TITLE: PCS04 PROM ARRAY

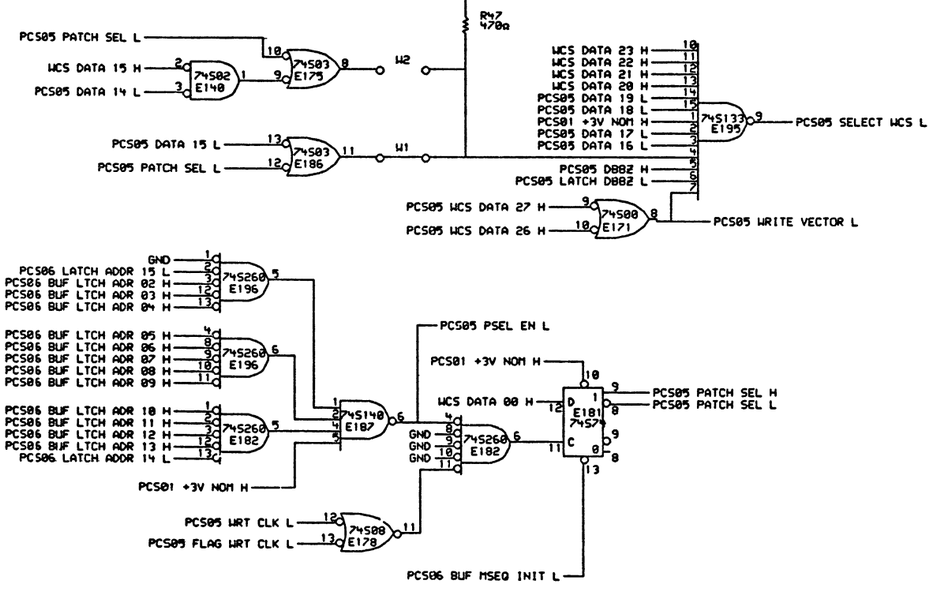
SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-04	A

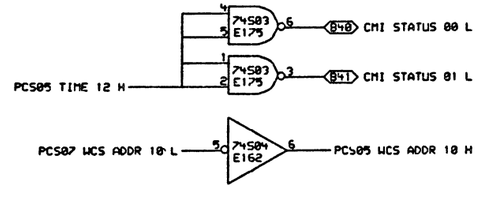












REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. K. Looney
CHK'D.
DATE 22-APR-85
ENG.
DATE
BOARD LOCATION:
SHEET 1 OF
DSKD:<PLOURDE>PCYB05.DRW;12 25-JUL-84 13:58
NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL:
B-DD-L0008-0-0

TITLE: PCS05
CONTROL LOGIC

SIZE	CODE	NUMBER	REV.
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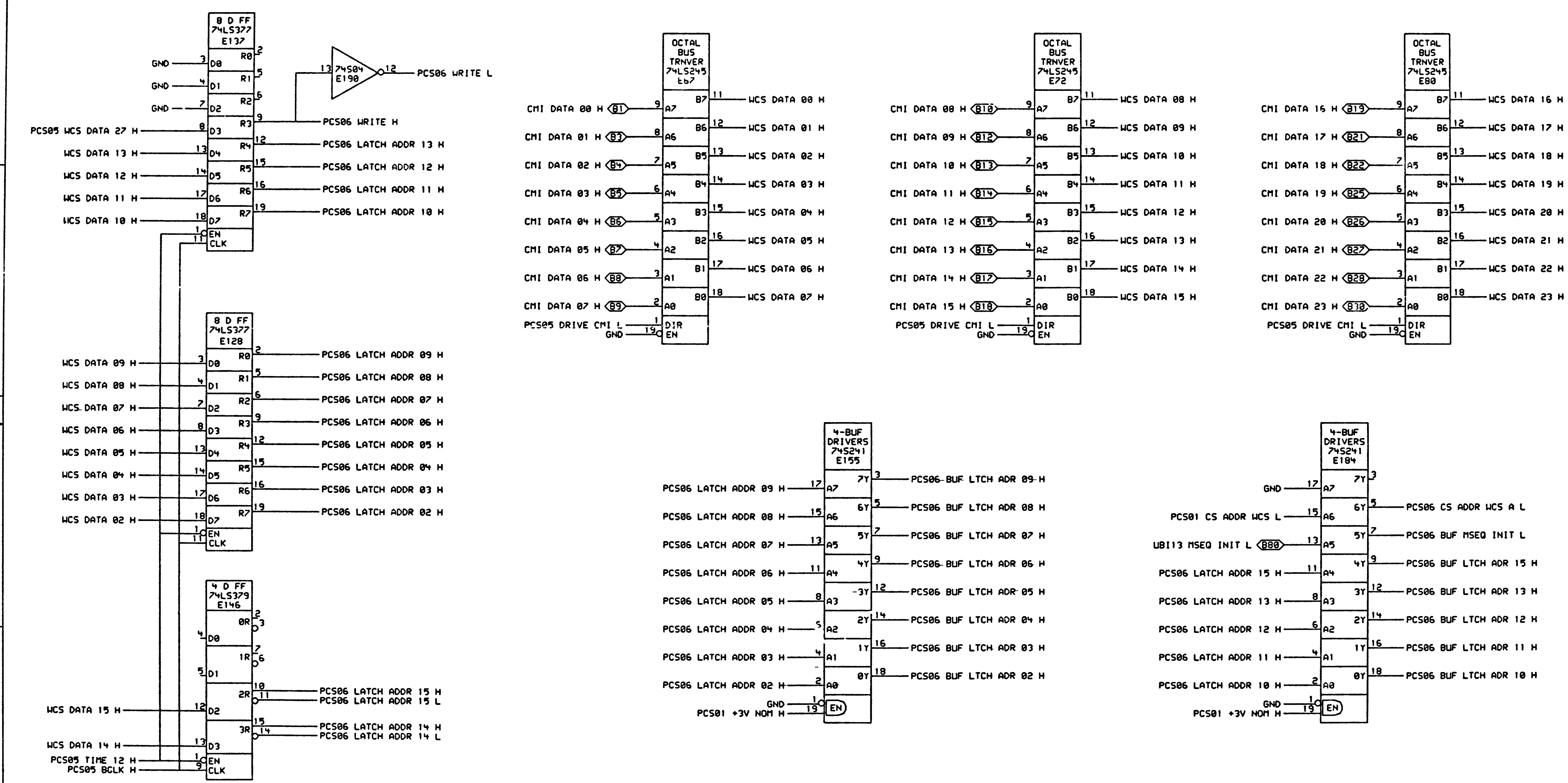


REVISIONS | CHK | CHANGE NO. | REV

digital | DATE 18-JUN-84 | ENG. | DATE

DSKD:<PLOURDE>PCYB06.DRW|18-APR-84 15:50

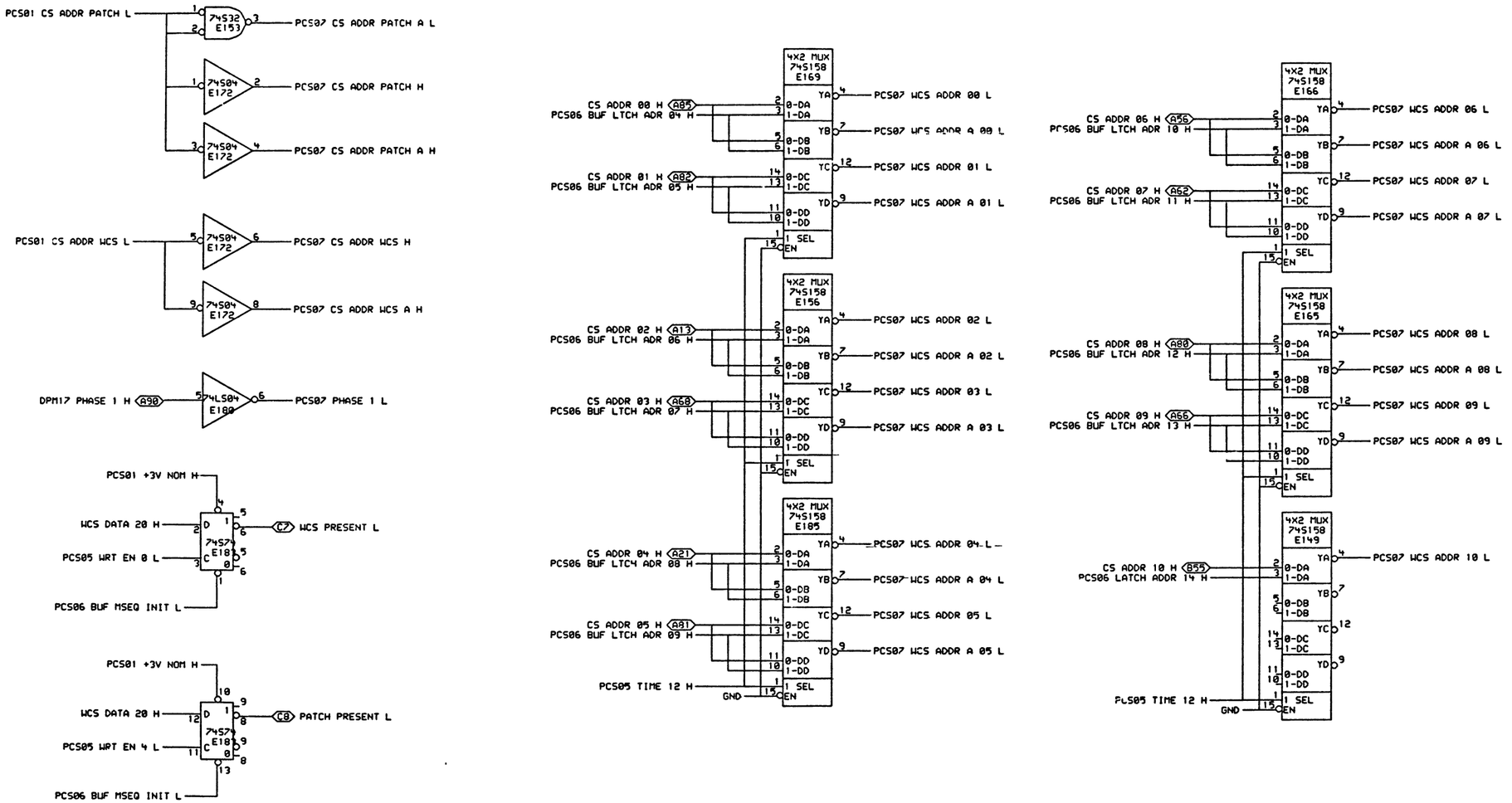
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

BOARD LOCATION: SHEET 1 OF 1

TITLE: PCS06 CONTROL LOGIC

SIZE K | CODE CS | NUMBER L0008-YB-06 | REV. A



REVISIONS		
CHK	CHANGE NO.	REV

digital

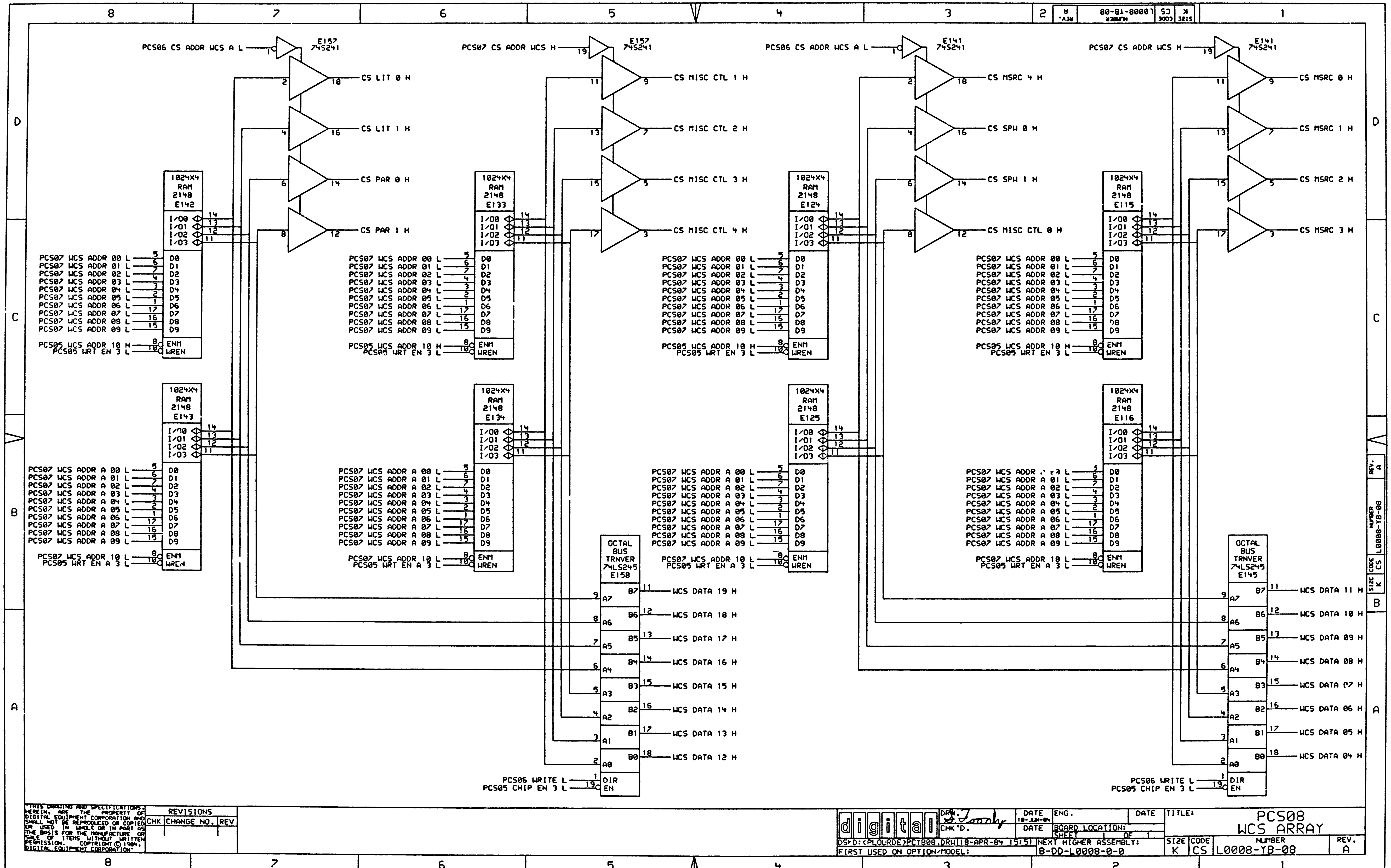
DSKD:<PLOURDE>PCYB07.DRW 18-APR-84 15:51
FIRST USED ON OPTION/MODEL:

DRN: T. Tomby DATE 18-JAN-84
CHK'D. DATE
ENG. DATE
BOARD LOCATION:
SHEET 1 OF 1
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS07 CMI TRANCEIVERS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-07	A

SIZE K | CODE CS | NUMBER L0008-YB-07 | REV. A



PCS06 CS ADDR WCS A L
E157 74S241
CS LIT 0 H
CS LIT 1 H
CS PAR 0 H
CS PAR 1 H
PCS07 CS ADDR WCS H
CS MISC CTL 1 H
CS MISC CTL 2 H
CS MISC CTL 3 H
CS MISC CTL 4 H
E141 74S241
CS MSRC 4 H
CS SPW 0 H
CS SPW 1 H
CS MISC CTL 0 H
CS MSRC 0 H
CS MSRC 1 H
CS MSRC 2 H
CS MSRC 3 H
1024X4 RAM 2148 E142
1024X4 RAM 2148 E133
1024X4 RAM 2148 E124
1024X4 RAM 2148 E115
1024X4 RAM 2148 E143
1024X4 RAM 2148 E134
1024X4 RAM 2148 E125
1024X4 RAM 2148 E116
PCS07 WCS ADDR 00 L
PCS07 WCS ADDR 09 L
PCS05 WCS ADDR 10 H
PCS05 WRT EN 3 L
PCS07 WCS ADDR A 00 L
PCS07 WCS ADDR A 09 L
PCS07 WCS ADDR 10 L
PCS05 WRT EN A 3 L
OCTAL BUS TRNVER 74LS245 E158
WCS DATA 19 H
WCS DATA 18 H
WCS DATA 17 H
WCS DATA 16 H
WCS DATA 15 H
WCS DATA 14 H
WCS DATA 13 H
WCS DATA 12 H
PCS06 WRITE L
PCS05 CHIP EN 3 L
OCTAL BUS TRNVER 74LS245 E145
WCS DATA 11 H
WCS DATA 10 H
WCS DATA 09 H
WCS DATA 08 H
WCS DATA 07 H
WCS DATA 06 H
WCS DATA 05 H
WCS DATA 04 H
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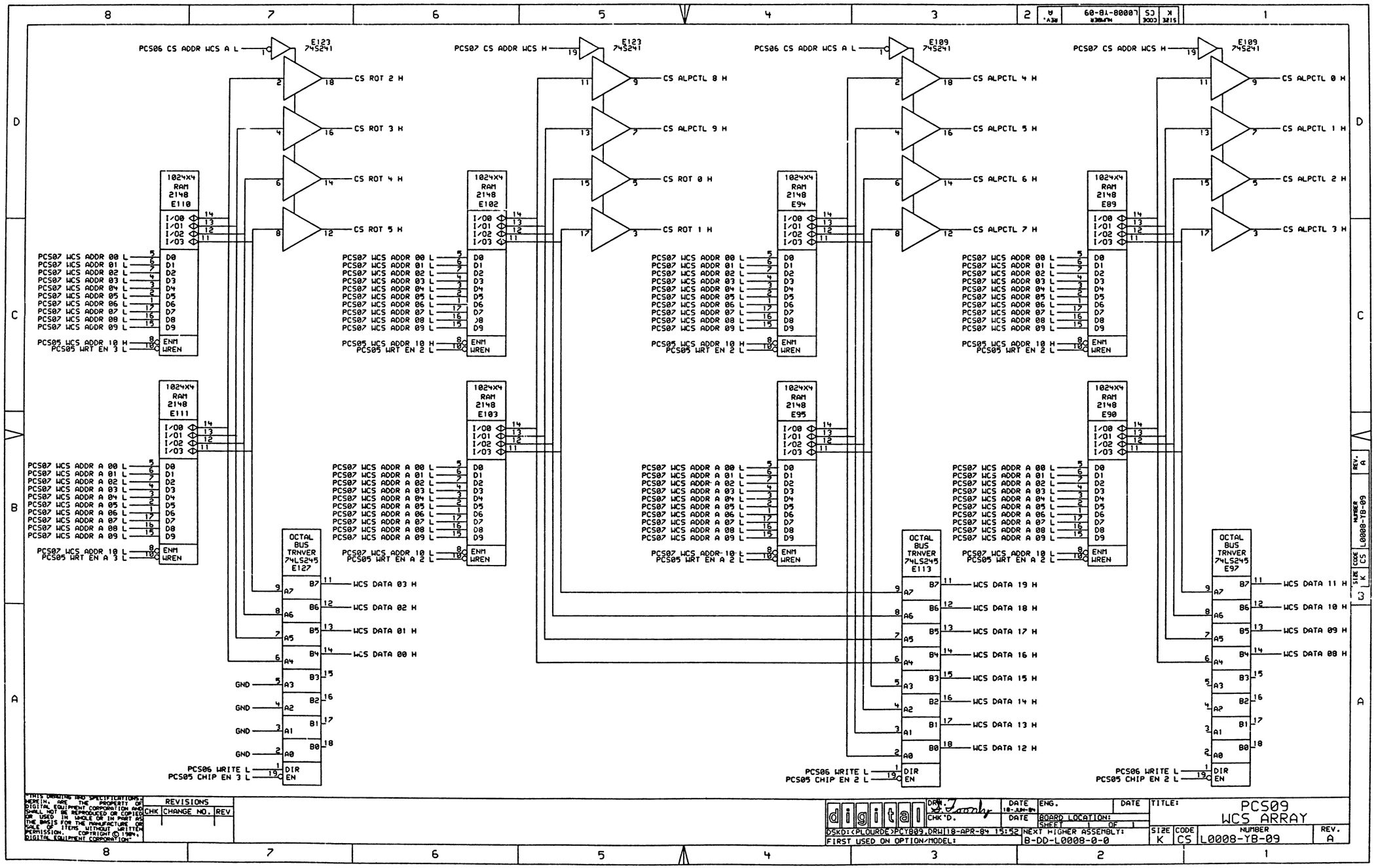
CHK CHANGE NO. REV
digital
DATE 18-JUN-84
OS:D:<PLOURDE>PCTB08.DRW 18-APR-84 15:51
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:
BOARD LOCATION:
SHEET 1 OF 1
TITLE: PCS08 WCS ARRAY
SIZE K CODE CS NUMBER L0008-YB-08 REV. A



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CHK	CHANGE NO.	REV

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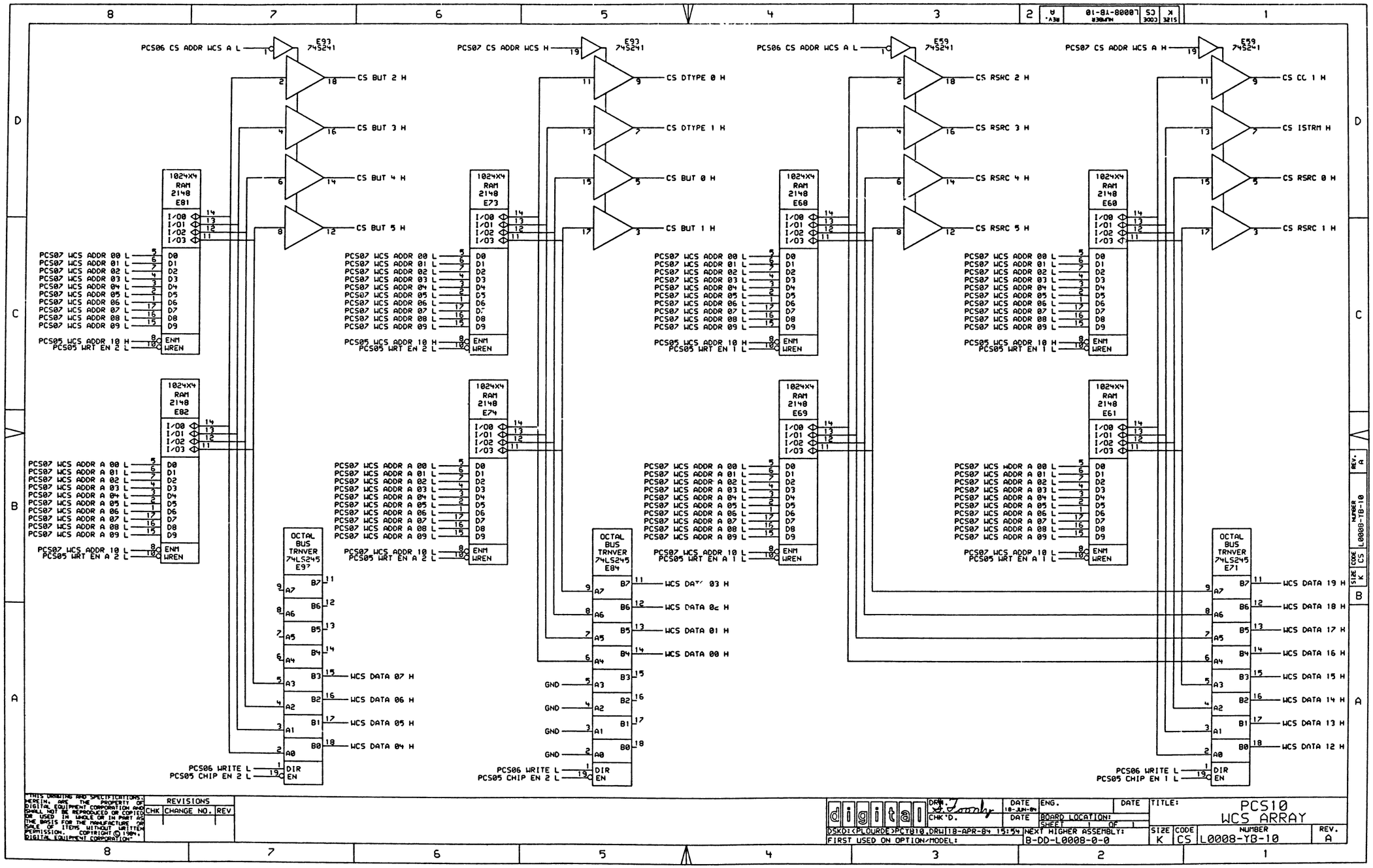
DRN. Timothy DATE 18-JUN-84
CHK'D. DATE
ENG. DATE
BOARD LOCATION:
SHEET OF

DSKD:[PLOURDE]PCY809.DRW;18-APR-84 15:52
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS09 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-09	A



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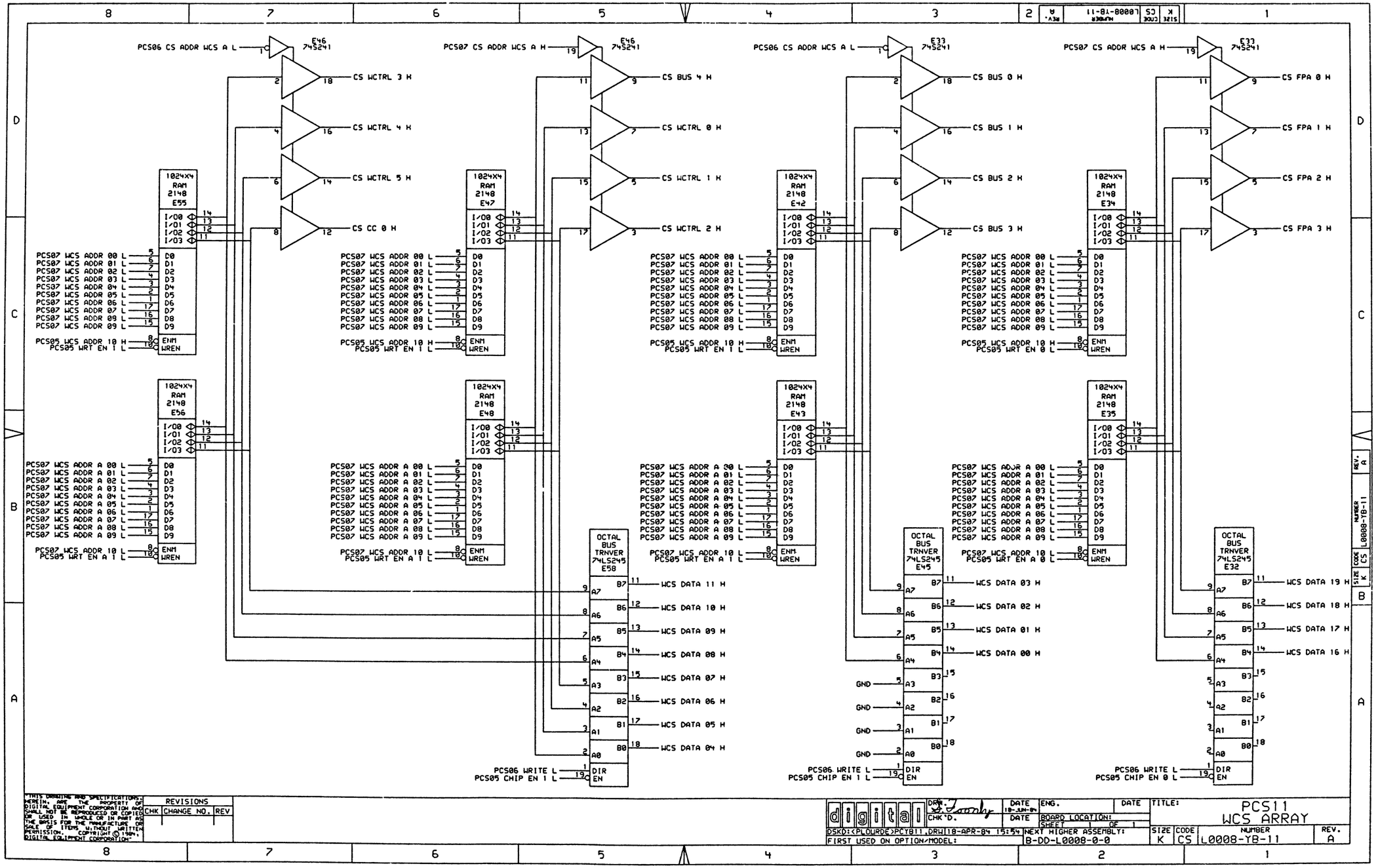
DRN. Tooley — DATE 18-JAN-84 — ENG. — DATE
CHK'D. — DATE — BOARD LOCATION: — SHEET 1 OF 1

DSKD:<PLOURDE>PCYB10.DRW|18-APR-84 15:54 — NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0 — FIRST USED ON OPTION/MODEL:

TITLE: PCS10 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-10	A

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-10	A



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DRN. E. Conroy
CHK'D.
DATE 18-JAN-84
DATE
ENG.
DATE
BOARD LOCATION:
SHEET 1 OF 1

DSKD:<PLOURDE>PCYB11.DRW|18-APR-84 15:54
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS11 WCS ARRAY

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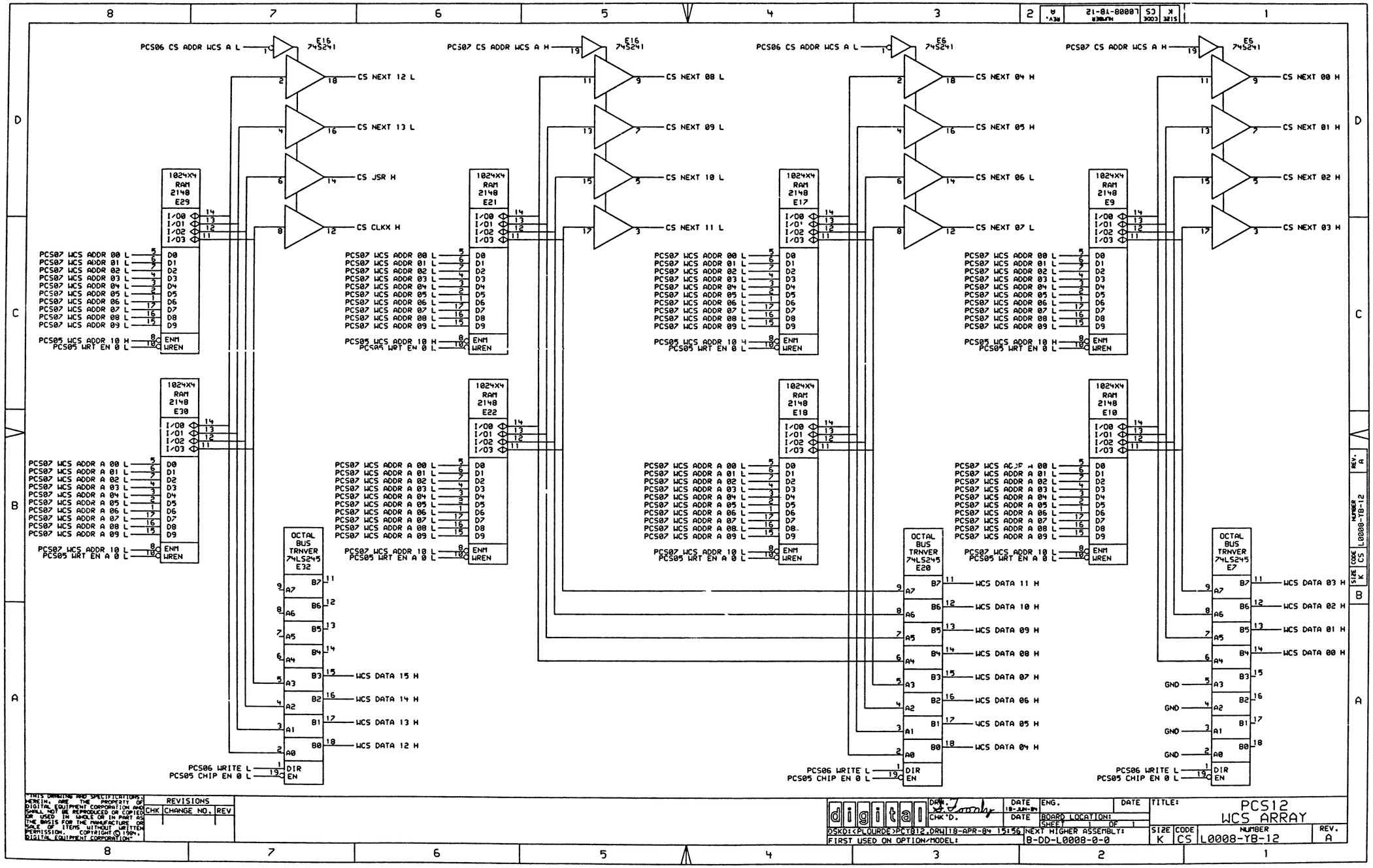
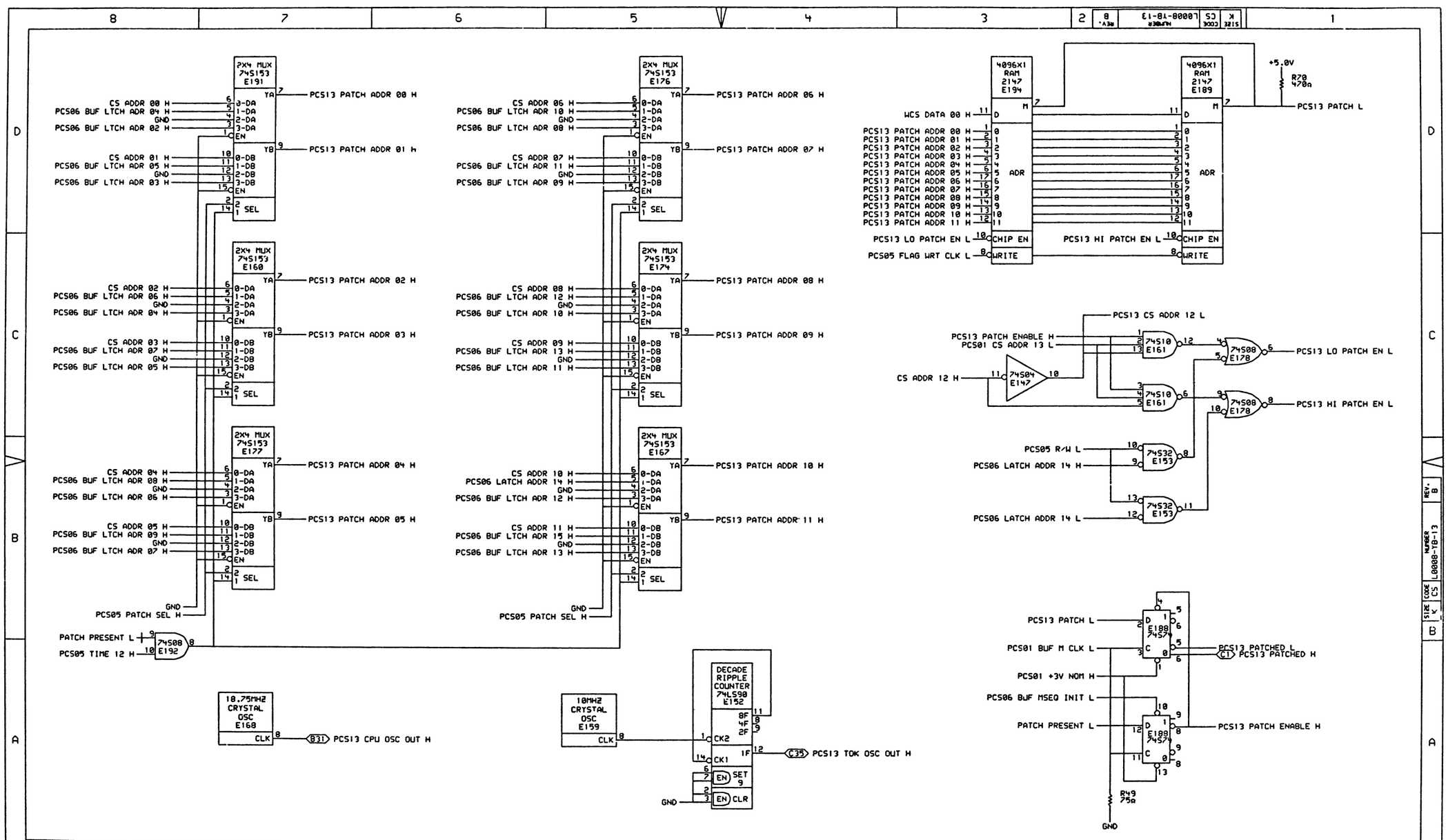

PCS06 CS ADDR WCS A L
PCS07 CS ADDR WCS A H
PCS06 CS ADDR WCS A L
PCS07 CS ADDR WCS A H
E16 74S241
E16 74S241
E6 74S241
E6 74S241
CS NEXT 12 L
CS NEXT 13 L
CS JSR H
CS CLKX H
CS NEXT 08 L
CS NEXT 09 L
CS NEXT 10 L
CS NEXT 11 L
CS NEXT 04 H
CS NEXT 05 H
CS NEXT 06 L
CS NEXT 07 L
CS NEXT 00 H
CS NEXT 01 H
CS NEXT 02 H
CS NEXT 03 H
1024X4 RAM 2148 E29
1024X4 RAM 2148 E21
1024X4 RAM 2148 E17
1024X4 RAM 2148 E9
1024X4 RAM 2148 E30
1024X4 RAM 2148 E22
1024X4 RAM 2148 E18
1024X4 RAM 2148 E10
I/O0 I/O1 I/O2 I/O3
D0 D1 D2 D3 D4 D5 D6 D7 D8 D9
ENM WREN
PCS07 WCS ADDR 00 L
PCS07 WCS ADDR 01 L
PCS07 WCS ADDR 02 L
PCS07 WCS ADDR 03 L
PCS07 WCS ADDR 04 L
PCS07 WCS ADDR 05 L
PCS07 WCS ADDR 06 L
PCS07 WCS ADDR 07 L
PCS07 WCS ADDR 08 L
PCS07 WCS ADDR 09 L
PCS07 WCS ADDR A 00 L
PCS07 WCS ADDR A 01 L
PCS07 WCS ADDR A 02 L
PCS07 WCS ADDR A 03 L
PCS07 WCS ADDR A 04 L
PCS07 WCS ADDR A 05 L
PCS07 WCS ADDR A 06 L
PCS07 WCS ADDR A 07 L
PCS07 WCS ADDR A 08 L
PCS07 WCS ADDR A 09 L
PCS05 WCS ADDR 10 H
PCS05 WRT EN 0 L
PCS07 WCS ADDR A 09 L
PCS05 WRT EN A 0 L
OCTAL BUS TRNVER 74LS245 E32
OCTAL BUS TRNVER 74LS245 E28
OCTAL BUS TRNVER 74LS245 E7
A7 A6 A5 A4 A3 A2 A1 A0
B7 B6 B5 B4 B3 B2 B1 B0
DIR EN
WCS DATA 15 H
WCS DATA 14 H
WCS DATA 13 H
WCS DATA 12 H
WCS DATA 11 H
WCS DATA 10 H
WCS DATA 09 H
WCS DATA 08 H
WCS DATA 07 H
WCS DATA 06 H
WCS DATA 05 H
WCS DATA 04 H
WCS DATA 03 H
WCS DATA 02 H
WCS DATA 01 H
WCS DATA 00 H
PCS06 WRITE L
PCS05 CHIP EN 0 L
GND
REVISIONS
CHK CHANGE NO. REV
digital
DRN
CHK D.
DATE 18-JUN-84
ENG.
DATE
DATE
BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCT812.DRW;18-APR-84 15:56
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
TITLE: PCS12 WCS ARRAY
SIZE K
CODE CS
NUMBER L0008-YB-12
REV. A



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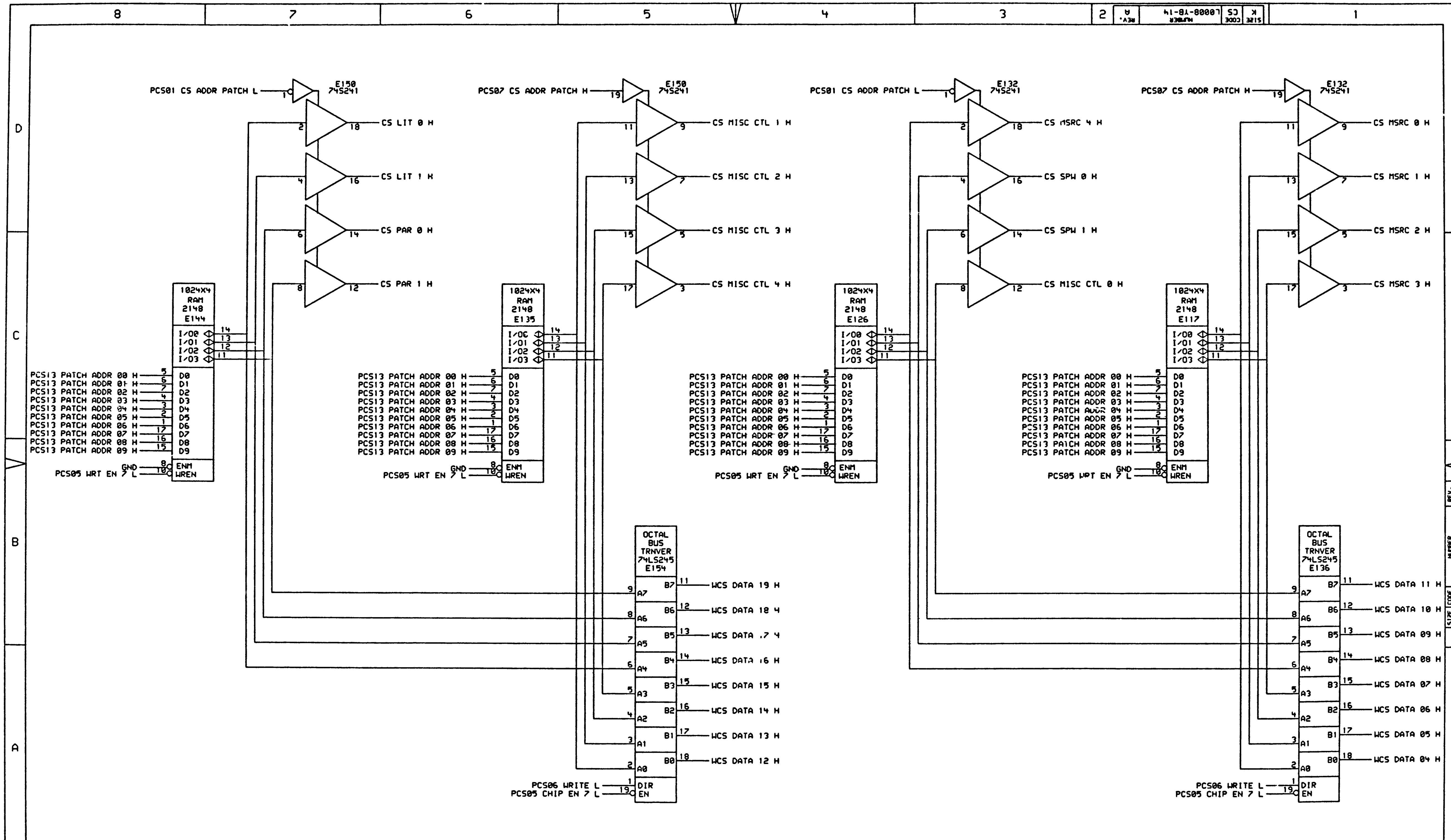
DRN Toomey	DATE 18-JAN-84	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION:	
		SHEET 1 OF 1	

OSKD:<PLOURDE>PCYB13.DRW 18-APR-84 15:57
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS13 PATCH ADDRESS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-13	B



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CHK	CHANGE NO.	REV

digital

DRN. DATE 18-JUN-84 | ENG. | DATE
CHK'D. | DATE | BOARD LOCATION:
SHEET 1 OF 1

DSKD:<PLOURDE>PCYB14.DRW 18-APR-84 15:58
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS14 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
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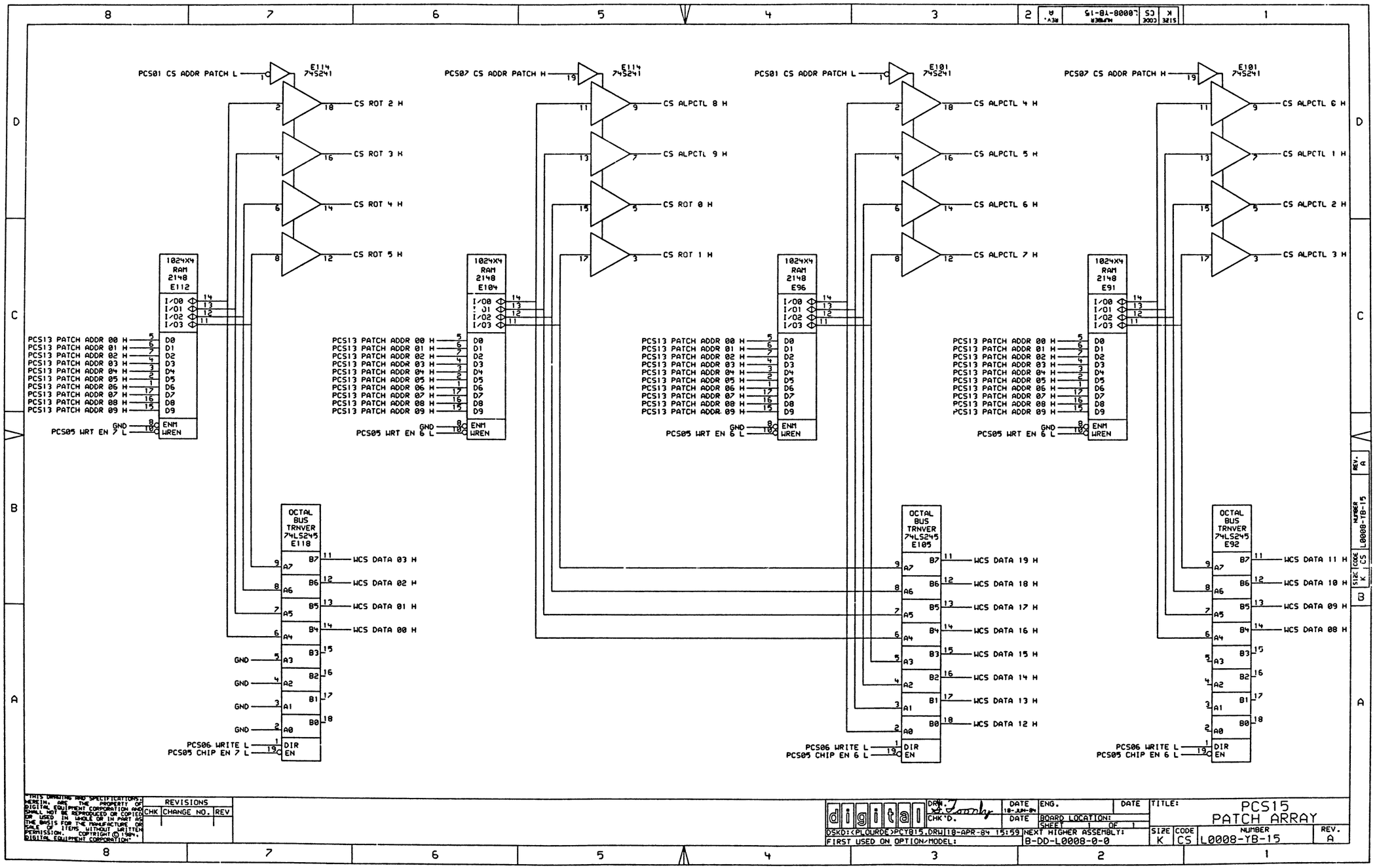

REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. D. Landay — DATE 18-JUN-84 — ENG. — DATE

CHK D. — DATE — BOARD LOCATION: — SHEET 1 OF 1

OSKD:<PLOURDE>PCY815.DRW|18-APR-84 15:59 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

TITLE: PCS15 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
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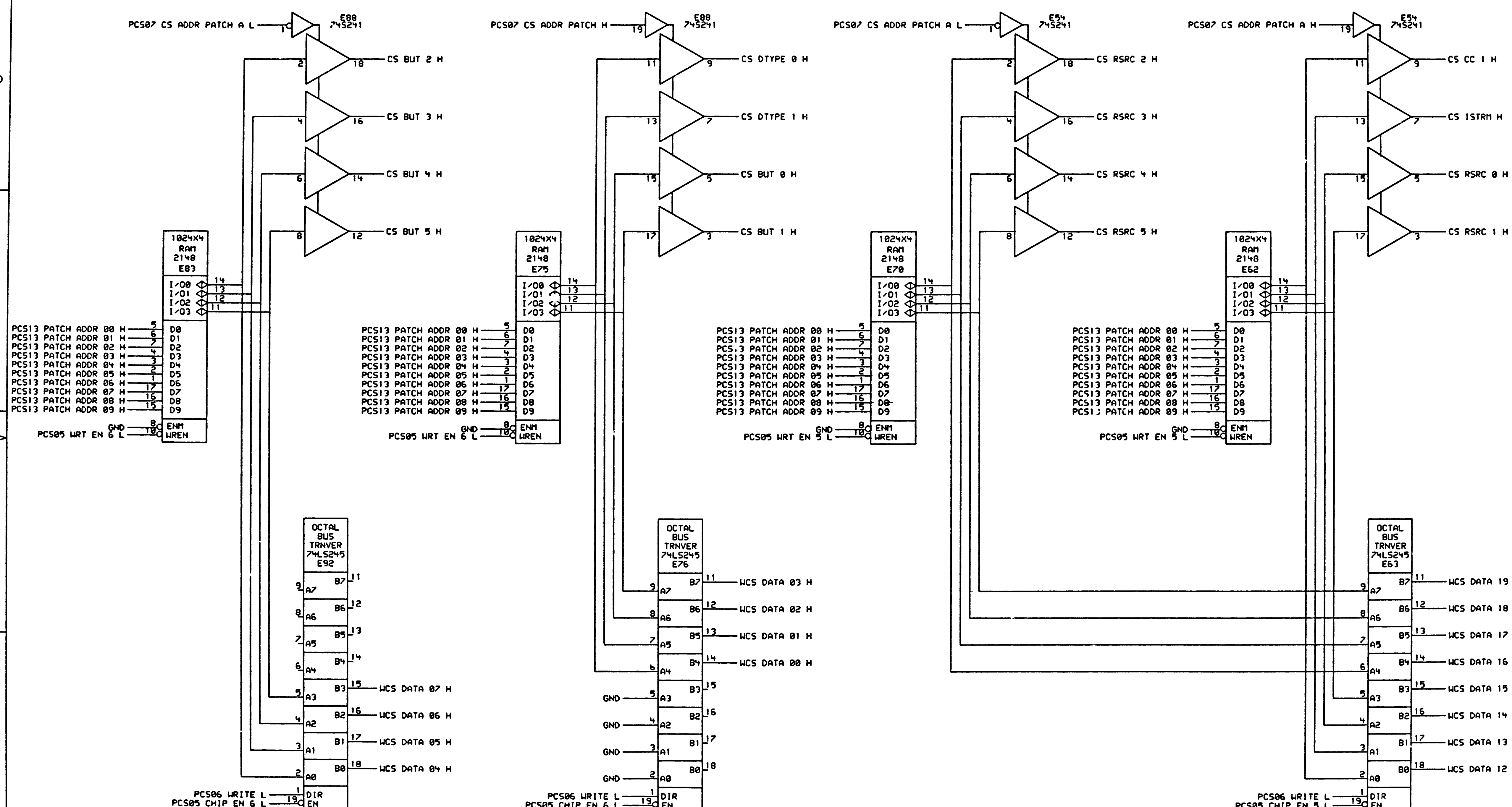

REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN.	DATE 18-JUN-84	ENG.	DATE	TITLE: PCS16 PATCH ARRAY
CHK'D.	DATE	BOARD LOCATION:	SHEET 1 OF 1	
DSKD:<PLOURDE>PCYB16.DRW 18-APR-84 16:20		NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0		
FIRST USED ON OPTION/MODEL:				

SIZE	CODE	NUMBER	REV.
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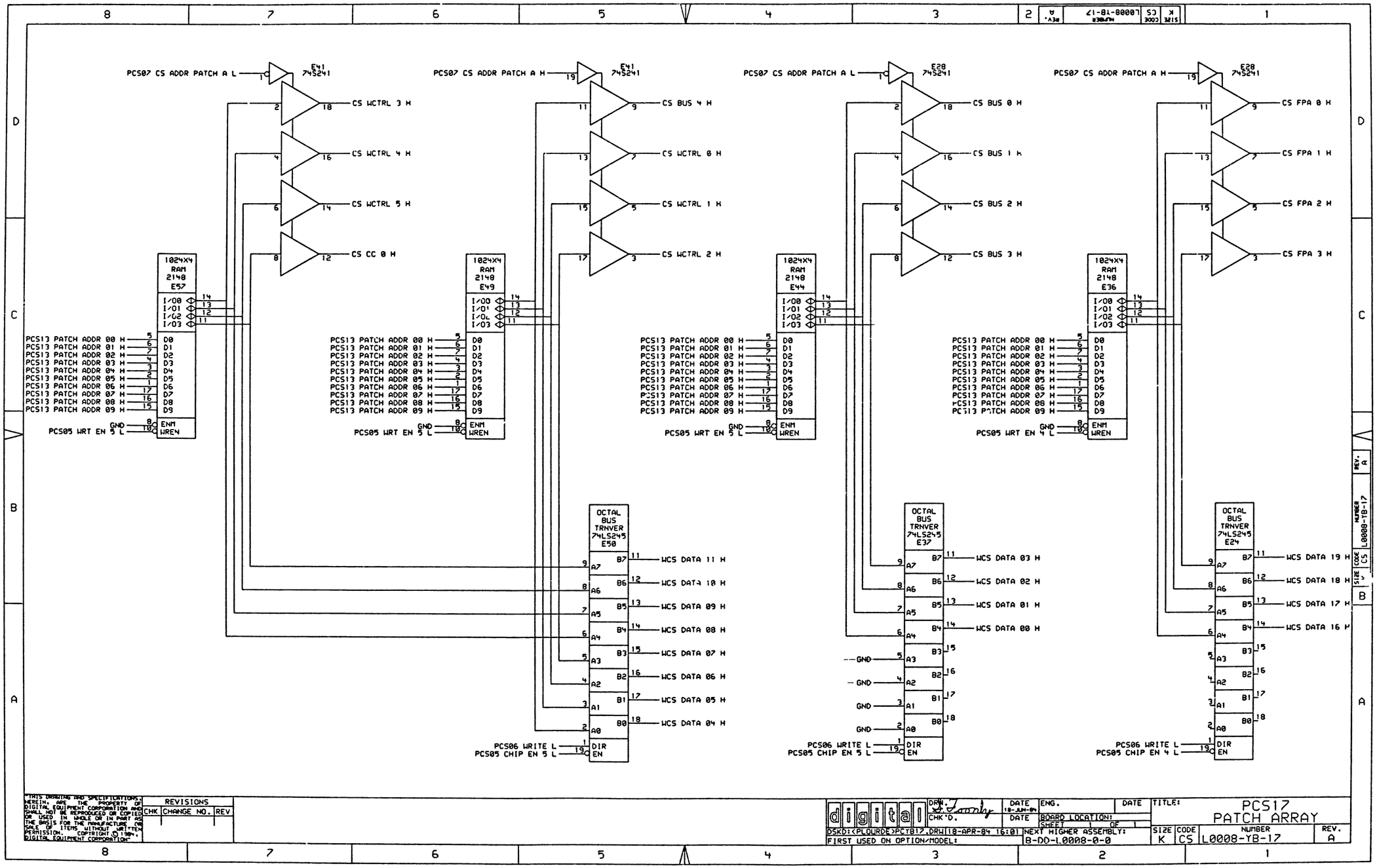
PCS07 CS ADDR PATCH A L
E41 74S241
CS WCTRL 3 H
CS WCTRL 4 H
CS WCTRL 5 H
CS CC 0 H
1024X4 RAM 2148 E57
PCS13 PATCH ADDR 00 H
PCS13 PATCH ADDR 01 H
PCS13 PATCH ADDR 02 H
PCS13 PATCH ADDR 03 H
PCS13 PATCH ADDR 04 H
PCS13 PATCH ADDR 05 H
PCS13 PATCH ADDR 06 H
PCS13 PATCH ADDR 07 H
PCS13 PATCH ADDR 08 H
PCS13 PATCH ADDR 09 H
PCS05 WRT EN 5 L
PCS07 CS ADDR PATCH A H
CS BUS 4 H
CS WCTRL 0 H
CS WCTRL 1 H
CS WCTRL 2 H
1024X4 RAM 2148 E49
PCS07 CS ADDR PATCH A L
CS BUS 0 H
CS BUS 1 H
CS BUS 2 H
CS BUS 3 H
1024X4 RAM 2148 E44
PCS07 CS ADDR PATCH A H
CS FPA 0 H
CS FPA 1 H
CS FPA 2 H
CS FPA 3 H
1024X4 RAM 2148 E36
PCS05 WRT EN 4 L
OCTAL BUS TRNVER 74LS245 E50
WCS DATA 11 H
WCS DATA 10 H
WCS DATA 09 H
WCS DATA 08 H
WCS DATA 07 H
WCS DATA 06 H
WCS DATA 05 H
WCS DATA 04 H
PCS06 WRITE L
PCS05 CHIP EN 5 L
OCTAL BUS TRNVER 74LS245 E37
WCS DATA 03 H
WCS DATA 02 H
WCS DATA 01 H
WCS DATA 00 H
OCTAL BUS TRNVER 74LS245 E24
WCS DATA 19 H
WCS DATA 18 H
WCS DATA 17 H
WCS DATA 16 H
PCS05 CHIP EN 4 L
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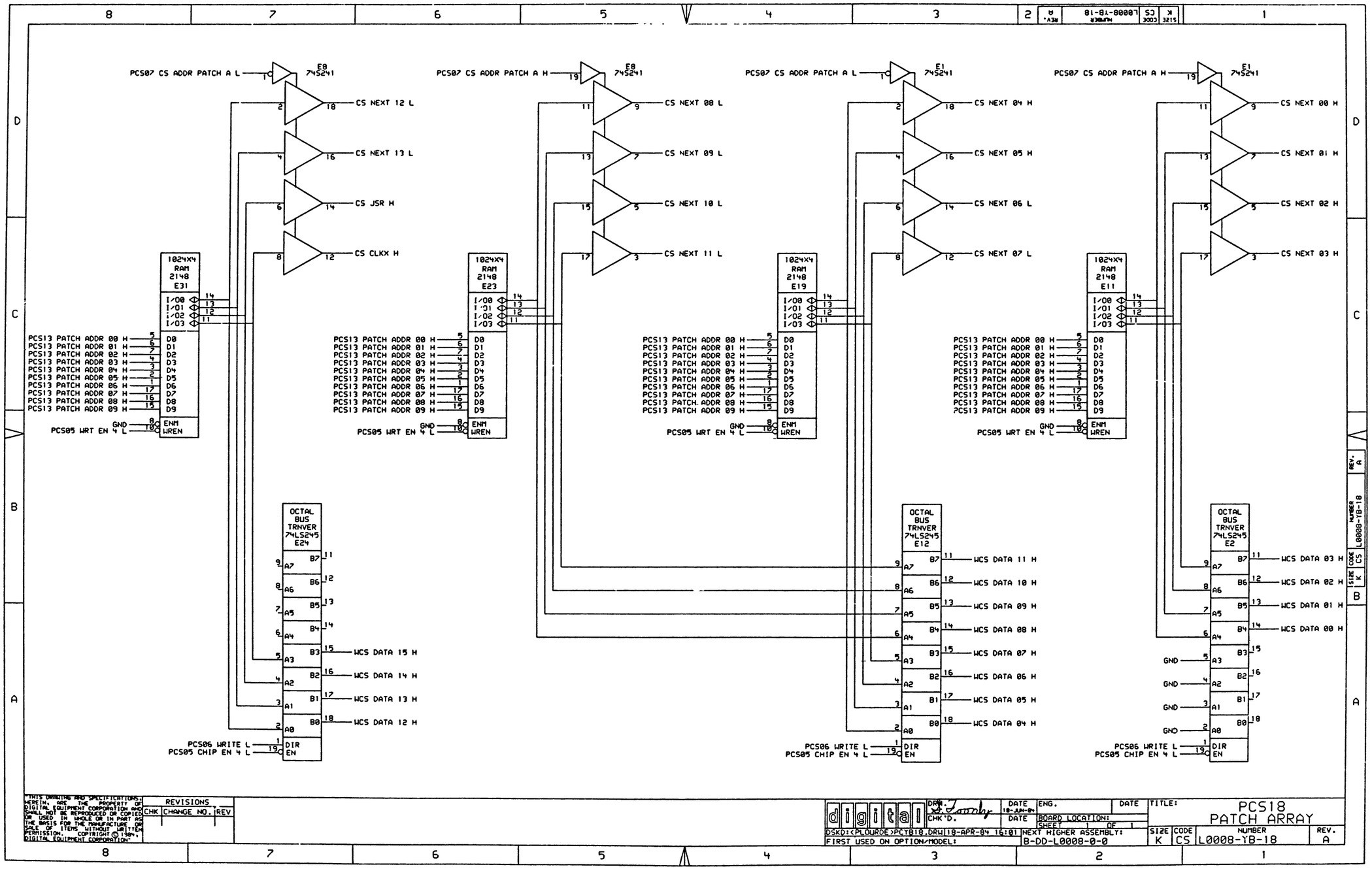
REVISIONS
CHK CHANGE NO. REV
digital
DRN J. Landry
CHK D.
DATE 18-JUN-84
ENG.
DATE
BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCYB17.DRW 18-APR-84 16:01
NEXT HIGHER ASSEMBLY:
B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:
TITLE: PCS17 PATCH ARRAY
SIZE K
CODE CS
NUMBER L0008-YB-17
REV. A



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CHK	CHANGE NO.	REV

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DRN. Tommy 18-JUN-84
CHK'D.
ENG. DATE
BOARD LOCATION:
SHEET 1 OF 1
DSKD1:<PLOURDE>PCT818.DRW;18-APR-84 16:01
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS18 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
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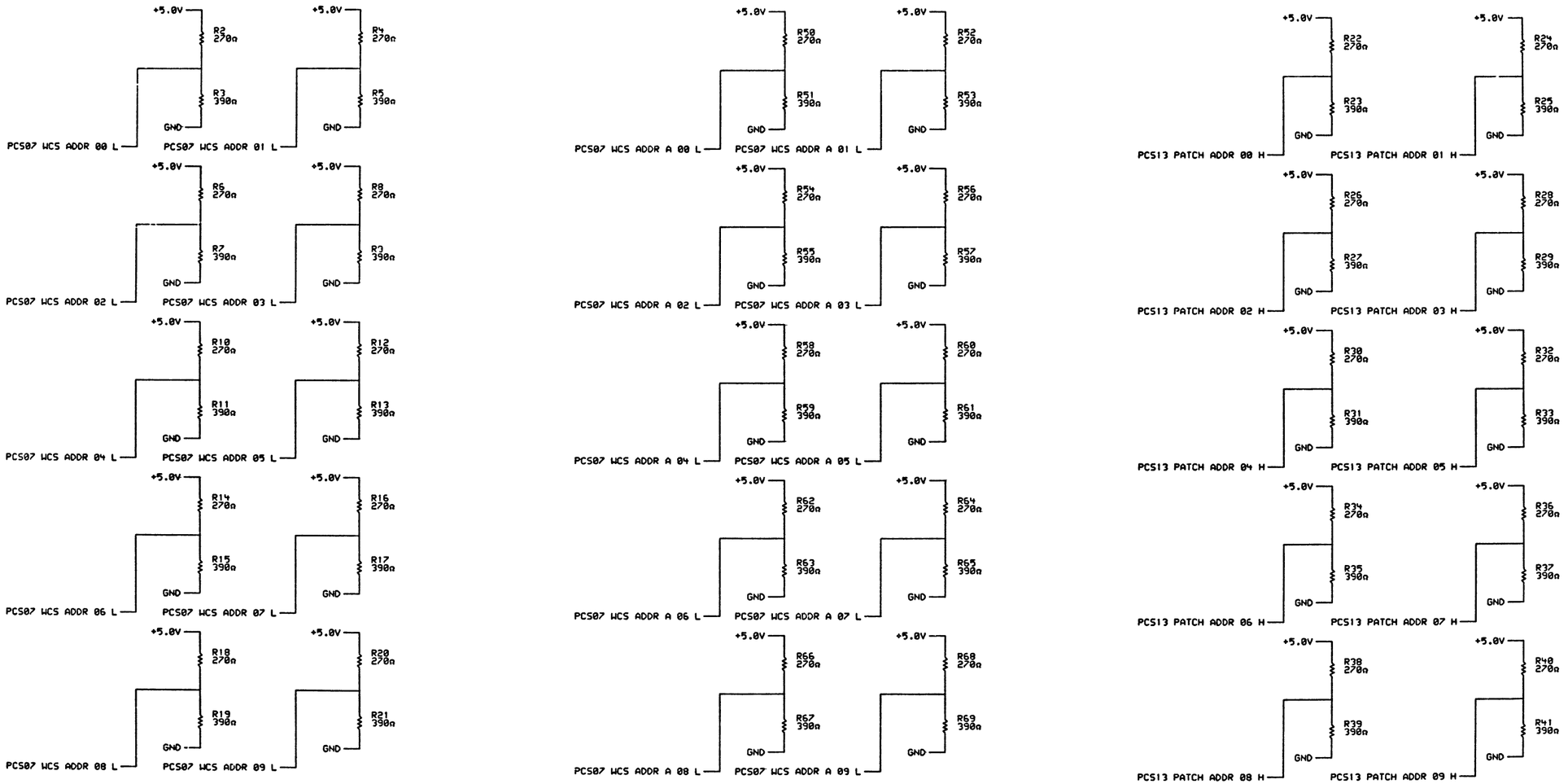


REVISIONS		
CHK	CHANGE NO.	REV

digital

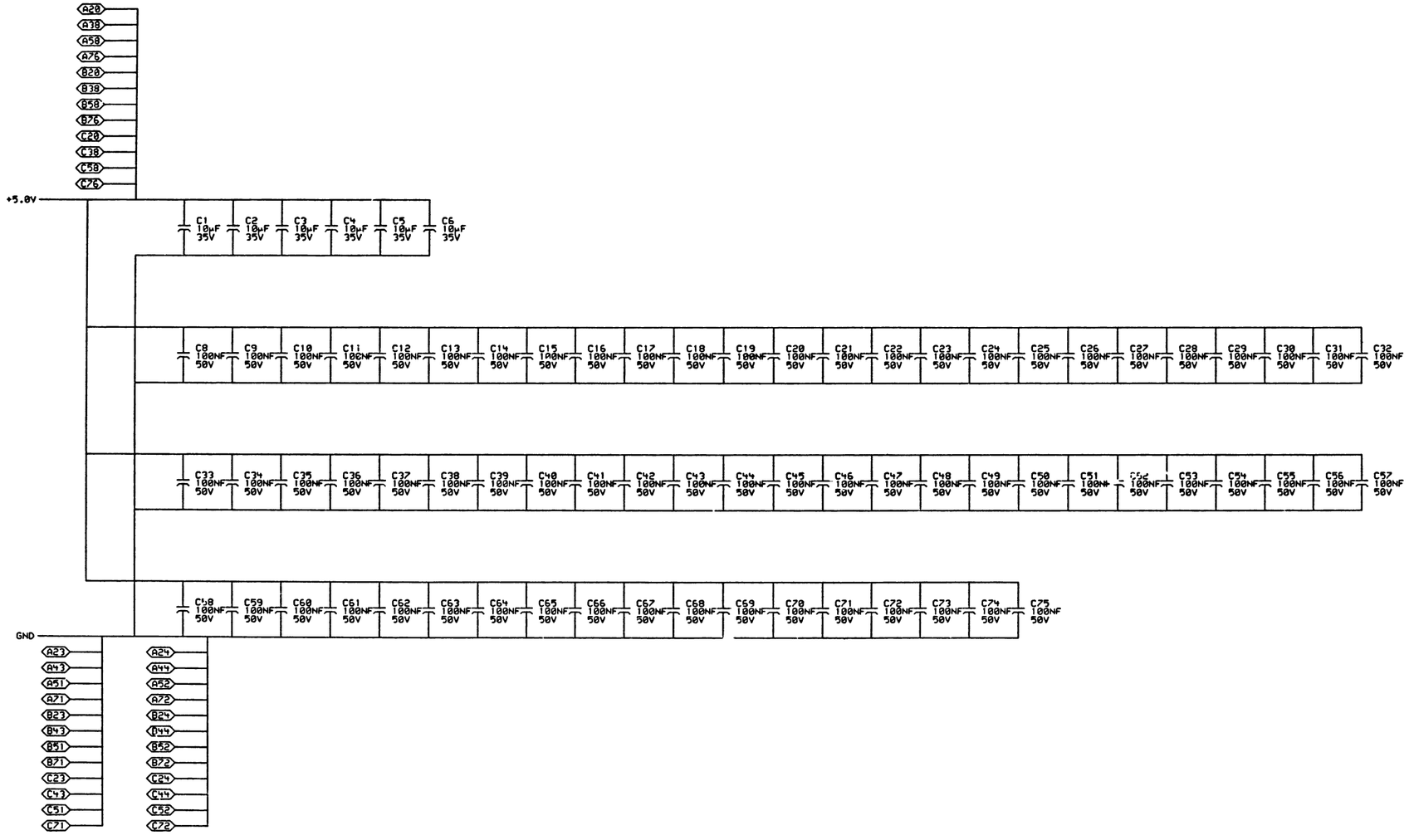
DRN. L. Landry
CHK D.

DATE	ENG.	DATE
18-JUN-84		
DATE	BOARD LOCATION:	
	SHEET OF	

OSKO:<PLOURDE>PCY819.DRW;18-APR-84 16:02
NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL:
B-DD-L0008-0-0

TITLE: PCS19 TERMINATORS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-19	A



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN: Zaraby
CHK: D.

DATE	ENG.	DATE
18-JUN-84		
DATE	BOARD LOCATION:	
	SHEET 1 OF 1	

DSKD:<PLOURDE>PCT820.DRW 18-APR-84 16:03
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS20

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YB-20	A

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YC	E

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS						
		L0008-YC	PARTS REVISION	A1	A2	B1	B2	C1	C2	D2
E-MD-5015549-0-0	7		DRILL AND ETCH DRAWING	A	B	B	B	B	B	B
		5015549-0	ETCH BOARD	B	B	B	B	B	B	B
E-UA-L0008-0-YC	1		UNIT ASSEMBLY	A	A	A	A	B	B	C
E-EC-5015549-YC	2		ETCH CUT L0008-YC	A	A	A	A	B	B	C
K-PL-L0008-0-DBP	3		PARTS LIST	A	A	B	B	B	B	C
K-PC-L0008-0-DBI	–		P.C. DATABASE	B	B	B	B	B	B	B
K-CS-L0008-YC-01	1		SCHEMATIC	A	A	A	A	A	A	A
K CS L0008 YC 02	1		SCHEMATIC	A	A	A	A	A	A	A
K CS L0008 YC 03	1		SCHEMATIC	A	A	A	A	A	A	A
K CS L0008 YC 04	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-05	1		SCHEMATIC	A	A	A	A	A	A	B
K-CS-L0008-YC-06	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-07	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-08	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-09	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-10	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-11	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-12	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-13	1		SCHEMATIC	A	A	A	A	B	B	B
K-CS-L0008-YC-14	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-15	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-16	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-17	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-18	1		SCHEMATIC	A	A	A	A	A	A	A
K-CS-L0008-YC-19	1		SCHEMATIC	A	A	A	A	A	A	A

NOTES:

REVISIONS								
REV.		B	C	C	D	D	E	
CHG NO.		TW001	TW002	TW002	TW003	TW003	TW004	
DATE		7-83	11-83	11-83	11-83	11-83	7-84	

digital

USED ON OPTION/MODEL

DRN. D FOURNIER	5-9-84
CHK'D	
ENG.	
PROD.	

TITLE: PCS

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YC	E

SHEET 1 OF 2

DRB 128

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YC	E

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
K-CS-L0008-YC-20	1		SCHEMATIC	A A A A A A A
K-CS-L0008-YC-DBS			DATA BASE	A A A A B B C

NOTES:

REVISIONS		
DATE	CHG NO.	REV.
7-83	TW001	B
11-83	TW002	C
11-83	TW002	C
11-83	TW003	D
11-83	TW003	D
7-84	TW004	E

digital

USED ON OPTION/MODEL

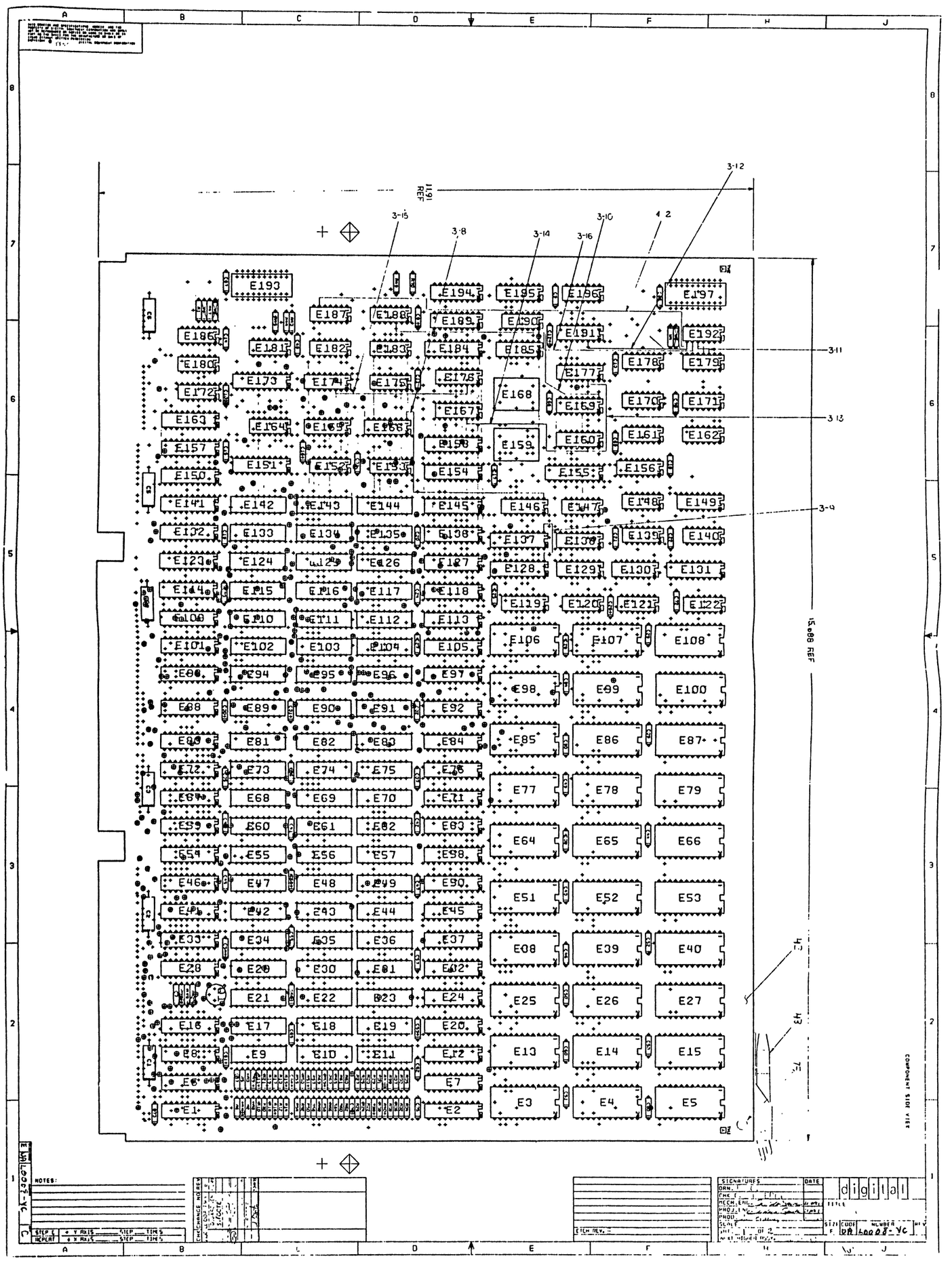
DRN.	D FOURNIER	5-9-84
CHK'D		
ENG.		
PROD.		

TITLE PCS

SIZE	CODE	NUMBER	REV.
B	DD	L0008-YC	E

SHEET 2 OF 2

DRB 126


3-12
3-15
3-8
3-14
3-16
3-10
4-2
3-11
3-13
3-9
4-3
4-4
15.688 REF
COMPONENT SIDE VIEW
digital

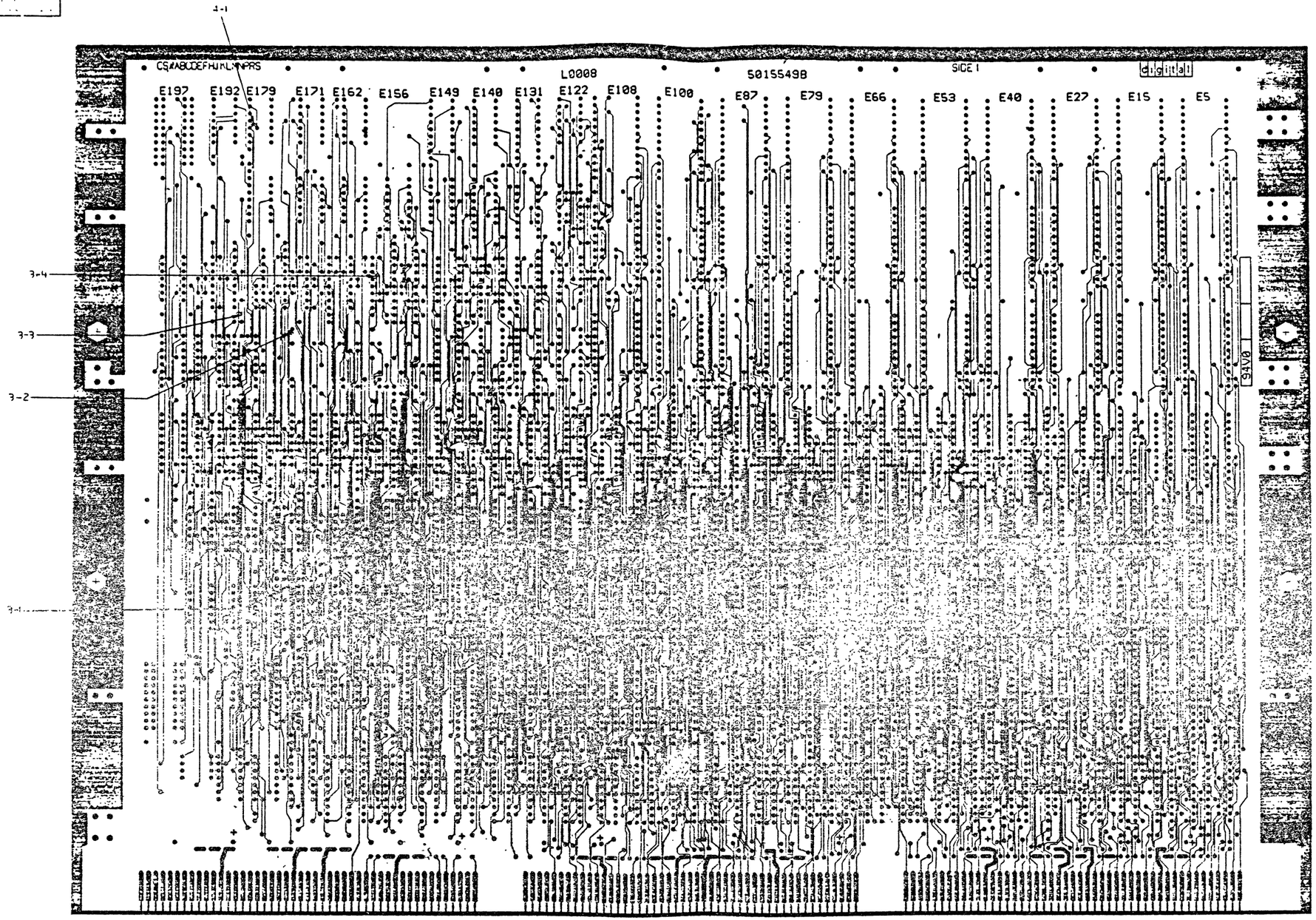
REWORK INSTRUCTIONS PER ECO # LC008-TW003
WIRE ADDS SIDE 1:

3 8 FROM E166-01 TO E146 01
3 9 FROM E137-21 TO E128 01
3 10 FROM E185-11 TO E169 01
3 11 FROM E179-13 TO E192 10
3 12 FROM E192-08 TO E191-14
3 13 FROM E177-14 TO E161 14
3 14 FROM E160-14 TO E167-14
3 15 FROM E176-14 TO E174-14
3 16 FROM E188-12 TO E192-03

REWORK INSTRUCTIONS ECO #4

WIRE ADD SIDE 1:
4-2 FROM E179-4 TO E187-6

TITLE PCS										DOCUMENT NUMBER	
										E VA	LCCC8-C YC
										SCALE	SHEET OF



DRAWN	LOOM-TWOO	B
DESIGNED	D.GARDNER	
CHECKED	S.FOOTE	
ENGINEER	LOOM-THOM	C
RELEASED	S.FOOTE	

DESCRIPTION

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES AND THE FOLLOWING TOLERANCES APPLY PER

LINEAR TOLERANCES	ANGLES +0° 30'	HOLE DIAMETERS	
.X ± .1			
.XX ± .03	SURFACE QUALITY		
.XXX ± .005			

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

DO NOT SCALE DRAWING

REMOVE BURRS AND BREAK SHARP CORNERS

MATERIAL

FINISH

		1-21-83
		1-21-83
		2-11-83
		2-11-83
		2-11-83

digital

ETCH CUT DRAWING

E EC 50155549-YC-0

A

C

1 OF 3

5015548B PCB SIDE 2
3-5
3-7
3-6

REWORK INSTRUCTIONS

ECO#3

ETCH CUTS SIDE 1

3-1 AT PTH ABOVE E174-16

3-2 CUT AT PTH ABOVE E168 PIN 1

3-3 AT E191-14

3-4 AT E182-14

ETCH CUTS SIDE 2

3-5 CUT ETCH DIRECTLY BELOW E150-1

3-6 BETWEEN E167-14 AND PTH GOING TO THE LEFT

3-7 BETWEEN E177-14 AND PTH GOING TO THE LEFT

REWORK INSTRUCTIONS ECO #4

ETCH CUT SIDE 1:

4-1 BETWEEN E179-4 AND E179-5

A3 0A3

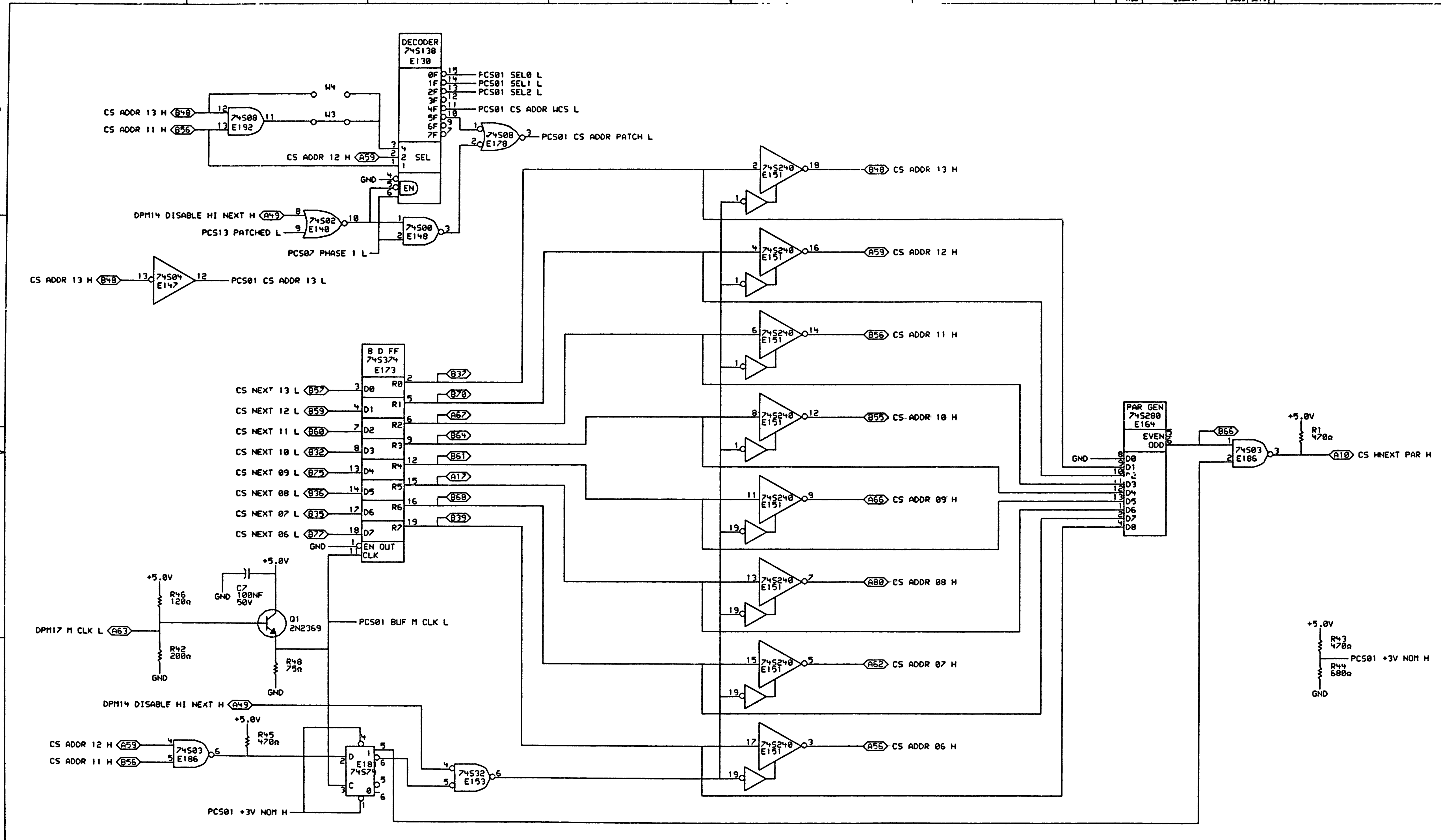
REVISION HISTORY

DATE	ECO NUMBER	REV

TITLE

DOCUMENT NUMBER

PLM	CODE	NUMBER	REV
E	[illegible]	[illegible]-YC-C	C



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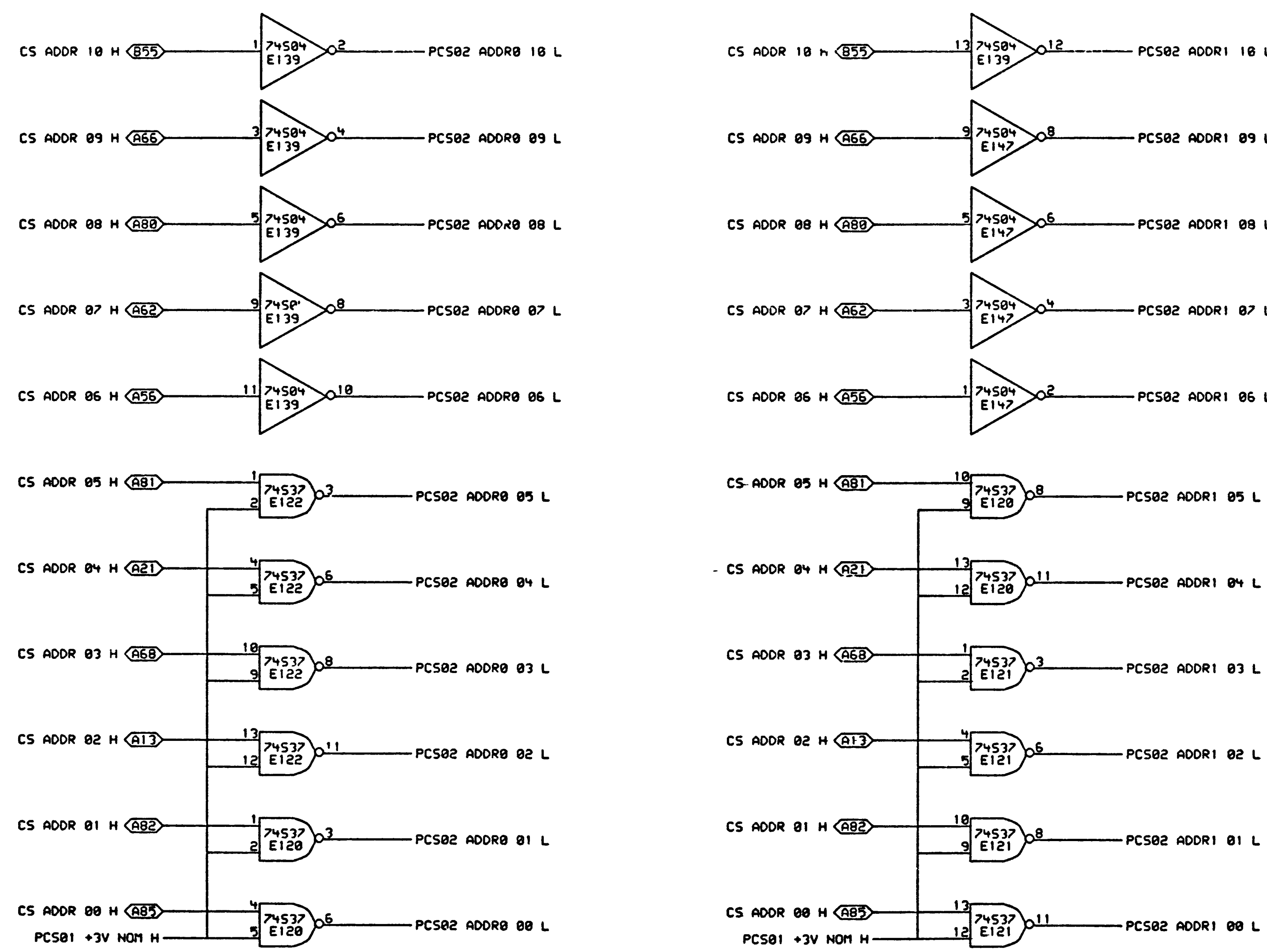
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. DATE 18-JUN-84
CHK'D. DATE
DSKD:<PLOURDE>PCTC01.DRW|18-APR-84 13:03
FIRST USED ON OPTION/MODEL:
ENG. DATE
BOARD LOCATION:
SHEET 1 OF 1
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS01 CS ADDR DECODE

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-01	A



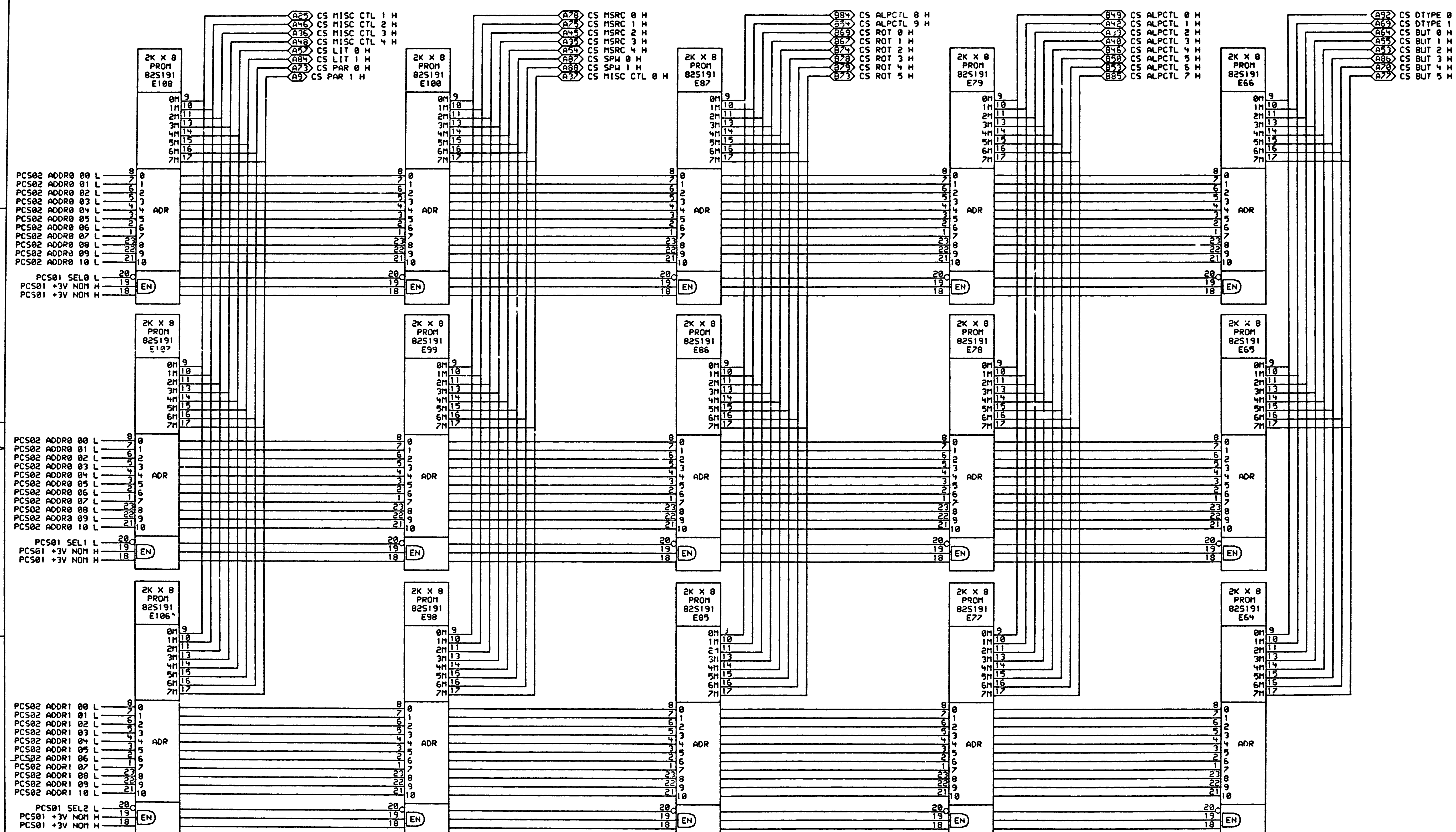
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. | DATE 18-JUN-84 | ENG. | DATE
CHK'D. | DATE | BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCYC02.DRW 18-APR-84 13:05
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS02 ADDRESS BUFFERS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-02	A



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN.	DATE 18-JUN-84	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: SHEET 1 OF 1	

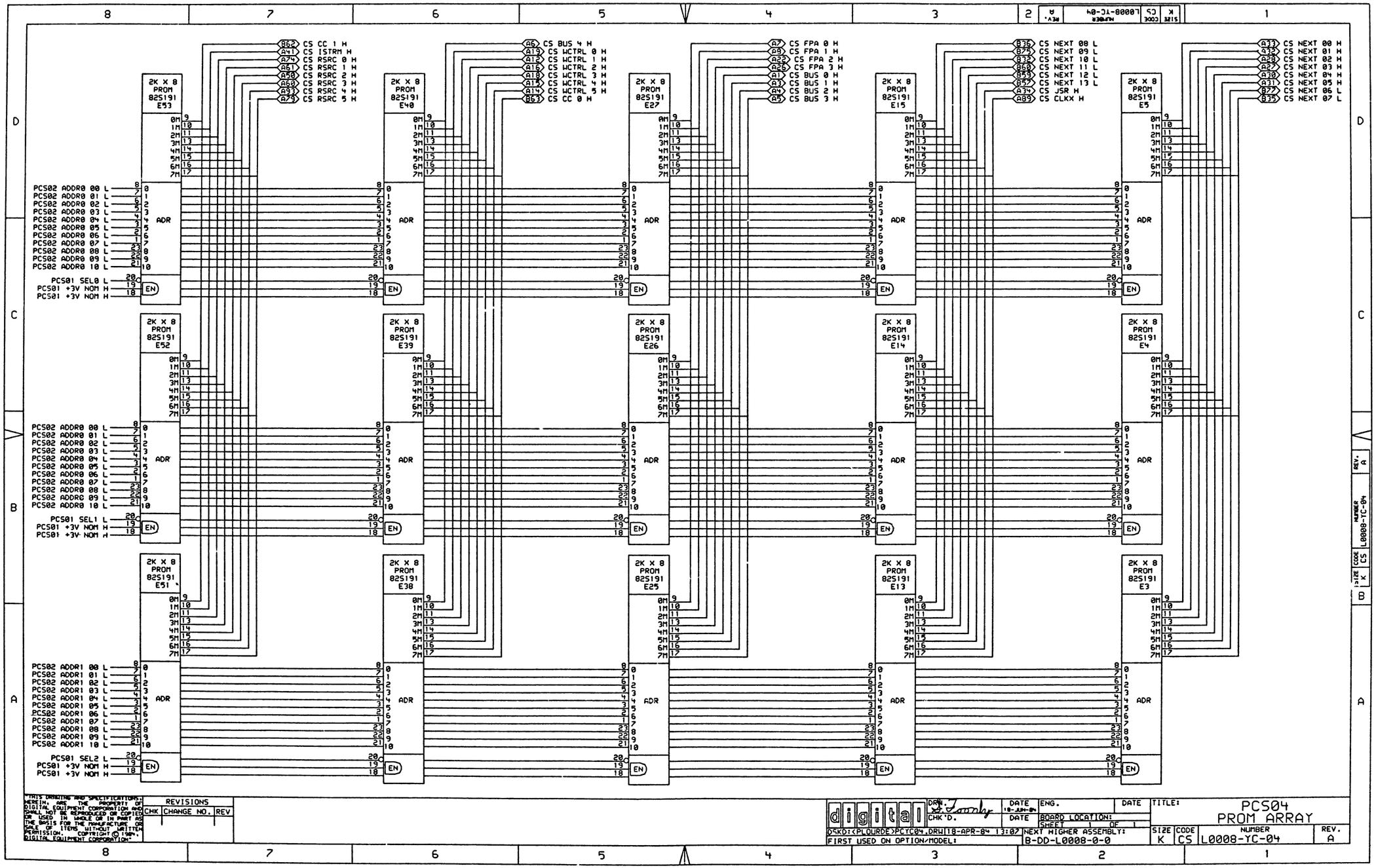
DSKD:<PLOURDE>PCYC03.DRW 18-APR-84 13:06

NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

TITLE: PCS03 PROM ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-03	A



REVISIONS

CHK	CHANGE NO.	REV

digital

DRN. T. Tansky — DATE 18-APR-84 — ENG. — DATE

CHK'D. — DATE — BOARD LOCATION:

SHEET 1 OF 1

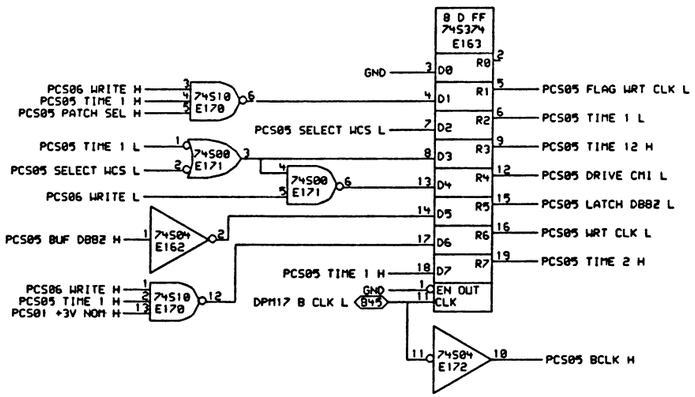
D:\KD:<PLOURDE>PCYC04.DRU 18-APR-84 13:07

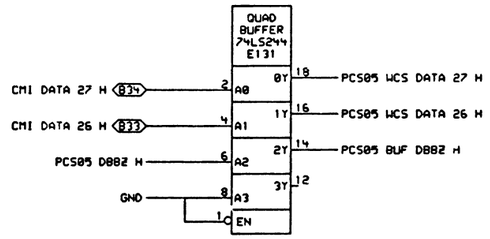
FIRST USED ON OPTION/MODEL:

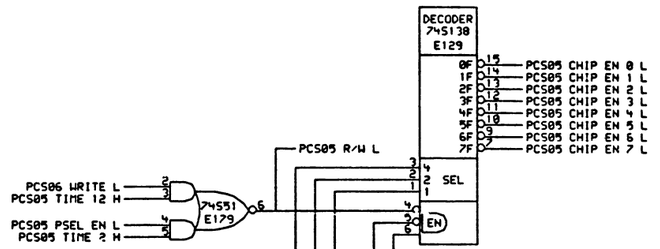
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

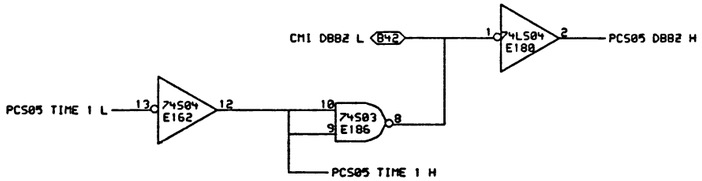
TITLE: PCS04 PROM ARRAY

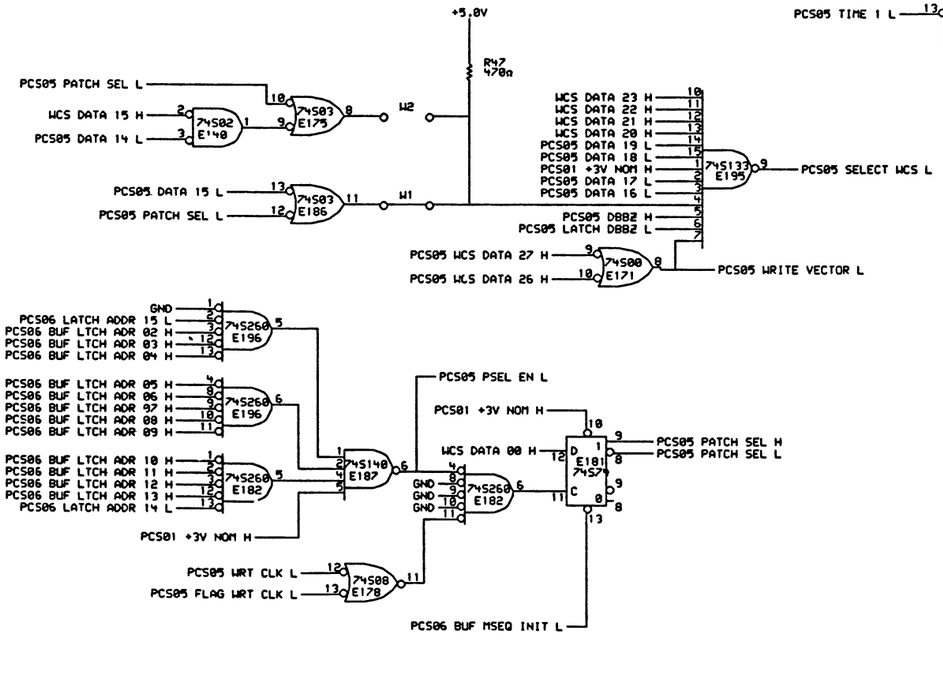
SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-04	A

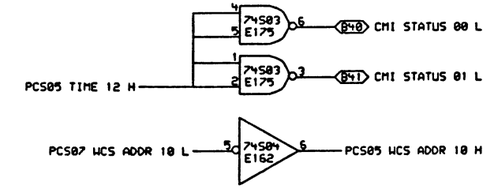












REVISIONS		
CHK	CHANGE NO.	REV

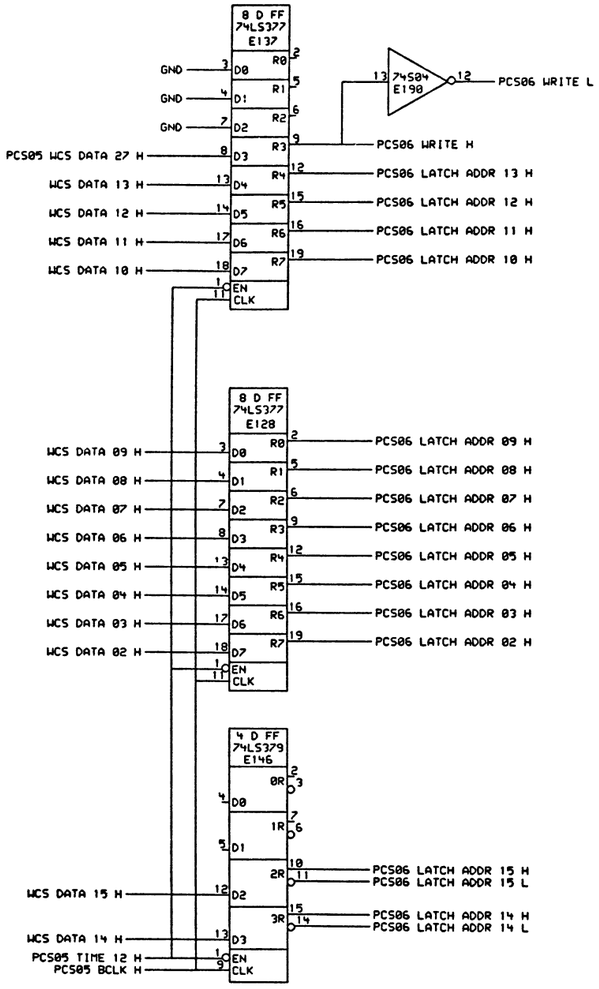
digital

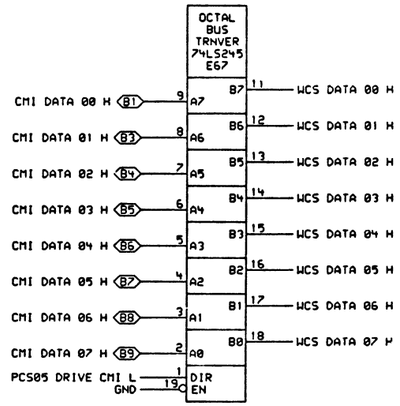
DRN: D. Landy
CHK'D.
DATE 11-MAR-85
ENG.
DATE
BOARD LOCATION:
SHEET OF
DSKD1:<FLOURIDE>PCYC05.DRW;12-JUL-84 14:15
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

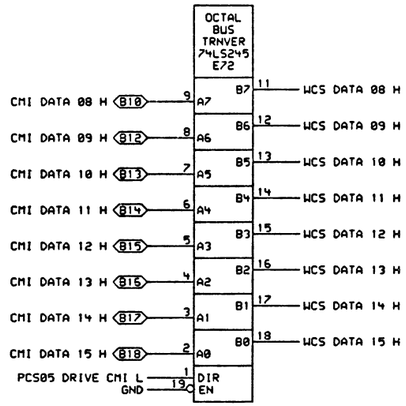
TITLE: PCS05 CONTROL LOGIC

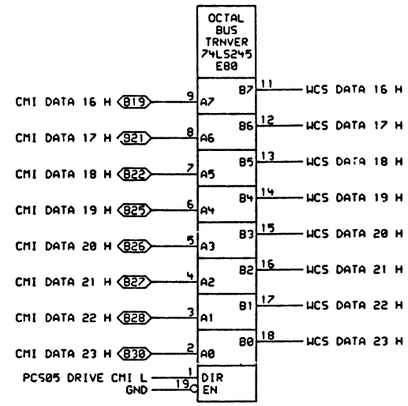
SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-05	B

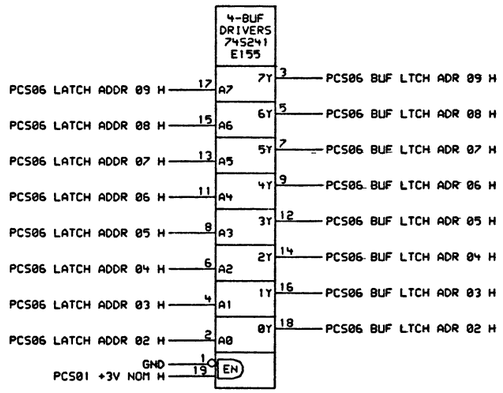
REV. B
NUMBER L0008-YC-05
CODE CS
SIZE K
B

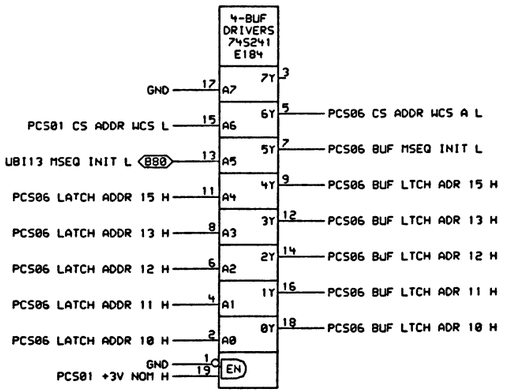










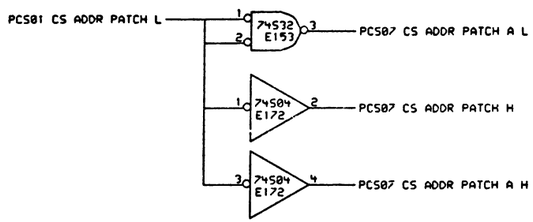


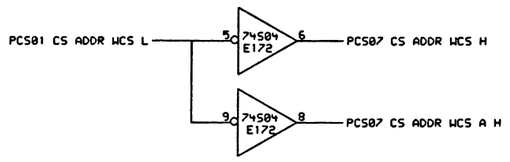
REVISIONS		
CHK	CHANGE NO.	REV

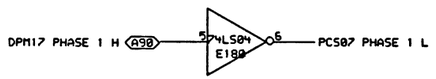
DRN: S.Landry	DATE 18-JUN-84	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: SHEET 1 OF 1	
OSKDI:<PLOURDE>PCYC06.DRW 18-APR-84 13:17		NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0	
FIRST USED ON OPTION/MODEL:			

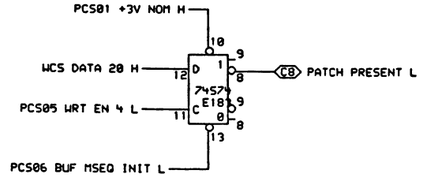
TITLE: PCS06 CONTROL LOGIC

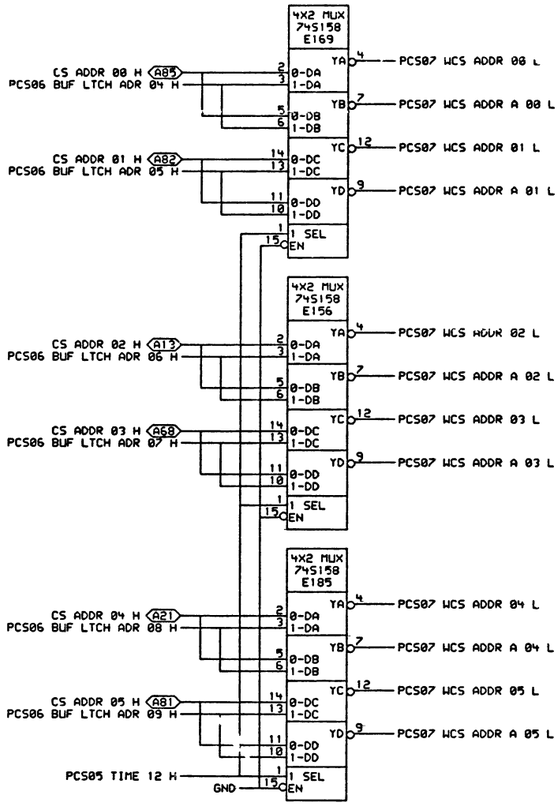
SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-06	A

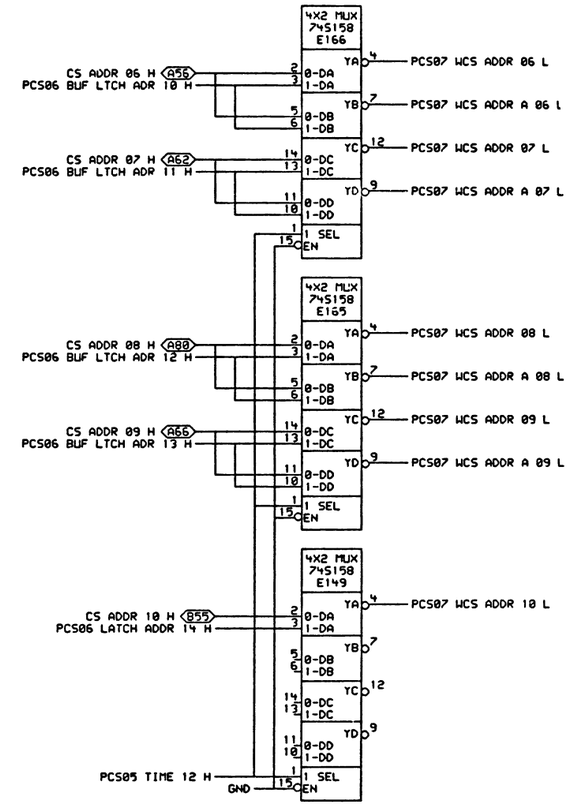












REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. Loosby | DATE 18-JUN-84 | ENG. | DATE | TITLE: PCS07 CMI TRANCEIVERS

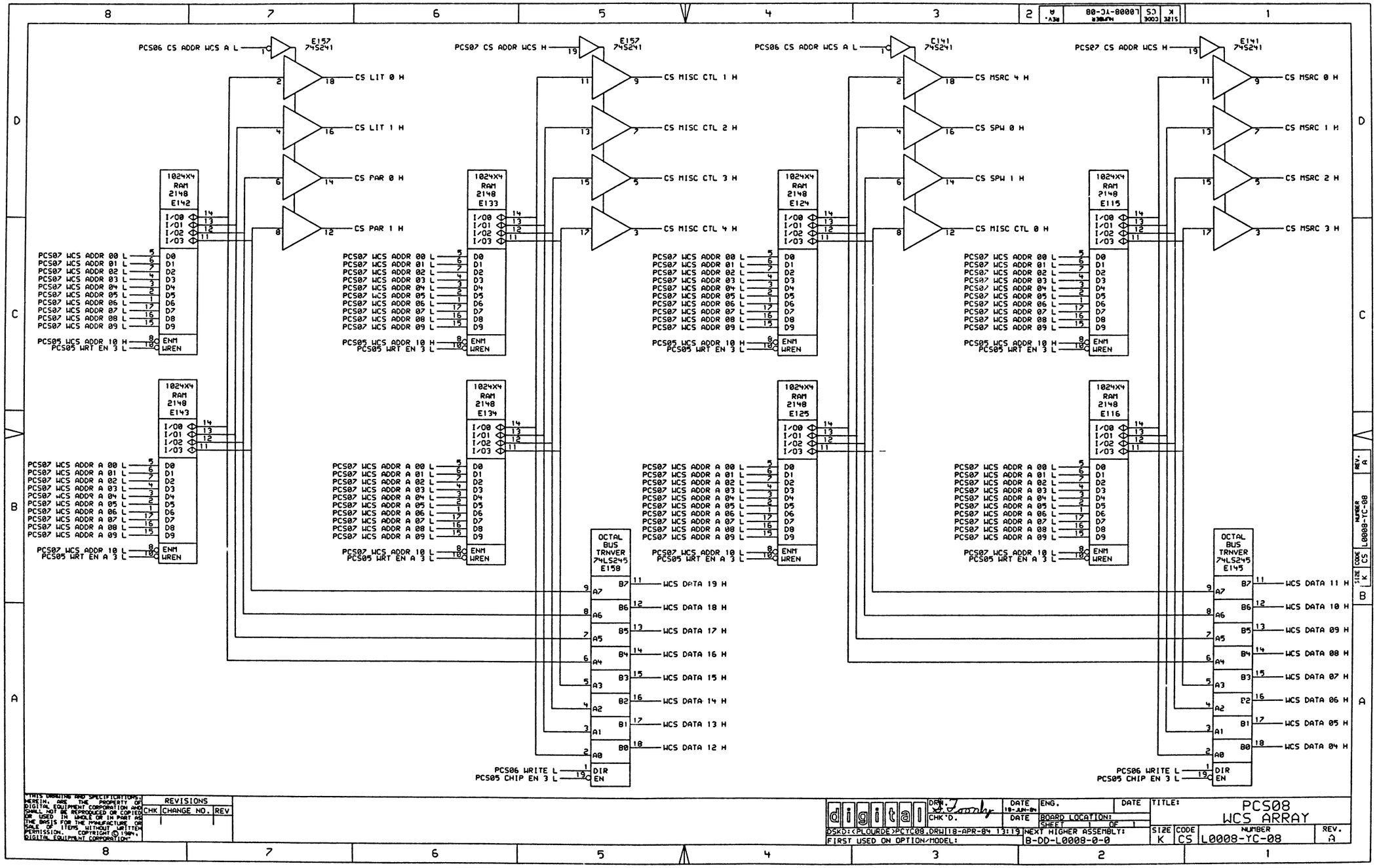
CHK D. | DATE | BOARD LOCATION: | SHEET 1 OF 1

DSKD:<PLCLRDE>PCYC07.DRW 18-APR-84 13:18 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-07	A

REV.	NUMBER	CODE	SIZE
A	L0008-YC-07	CS	K



REVISIONS		
CHK	CHANGE NO.	REV

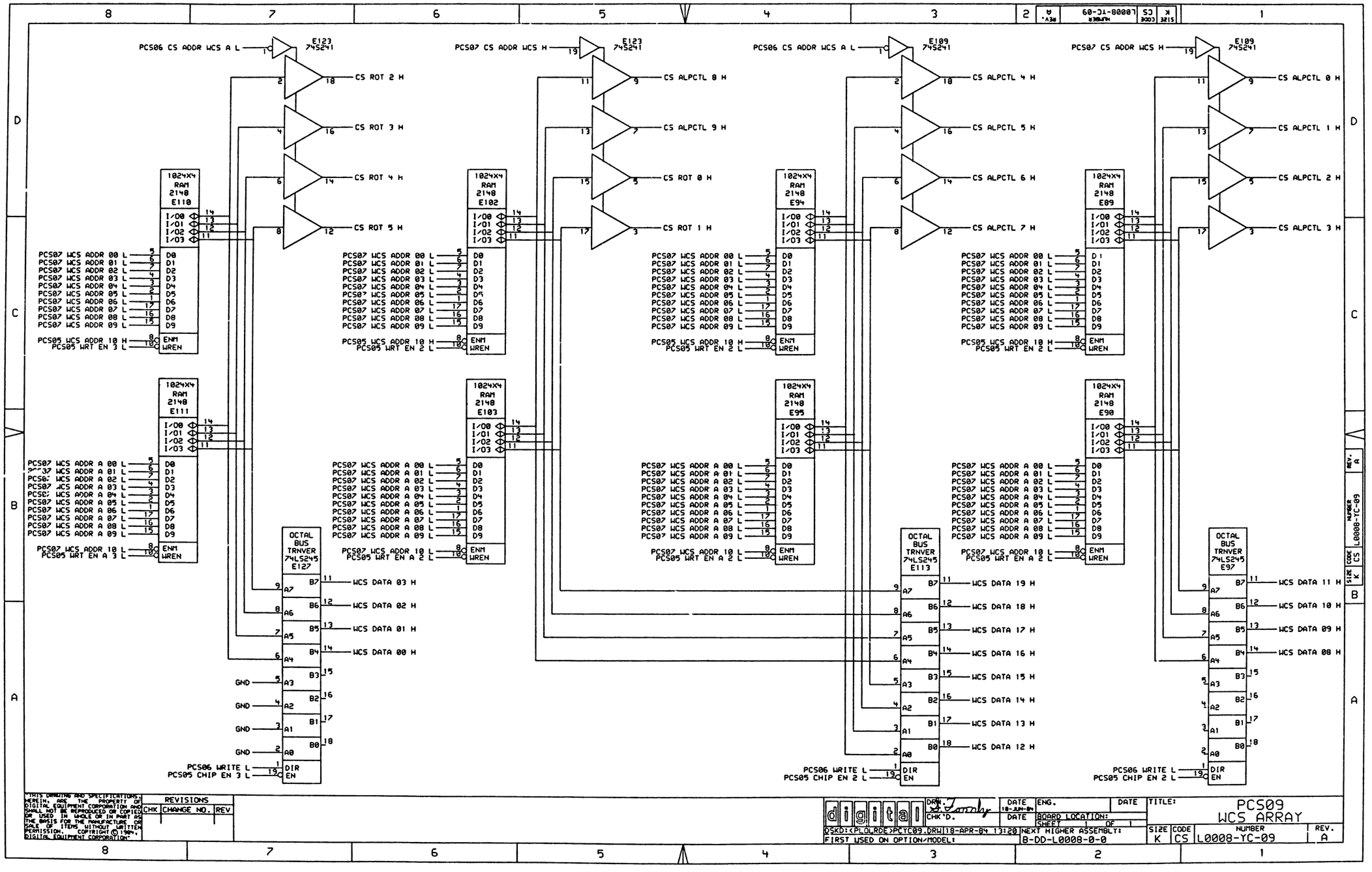
digital

DRW. Tooky 18-APR-84 | ENG. | DATE | BOARD LOCATION: | SHEET 1 OF 1

DSKD:<PLOURDE>PCYC08.DRW|18-APR-84 13:19 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0 | FIRST USED ON OPTION/MODEL:

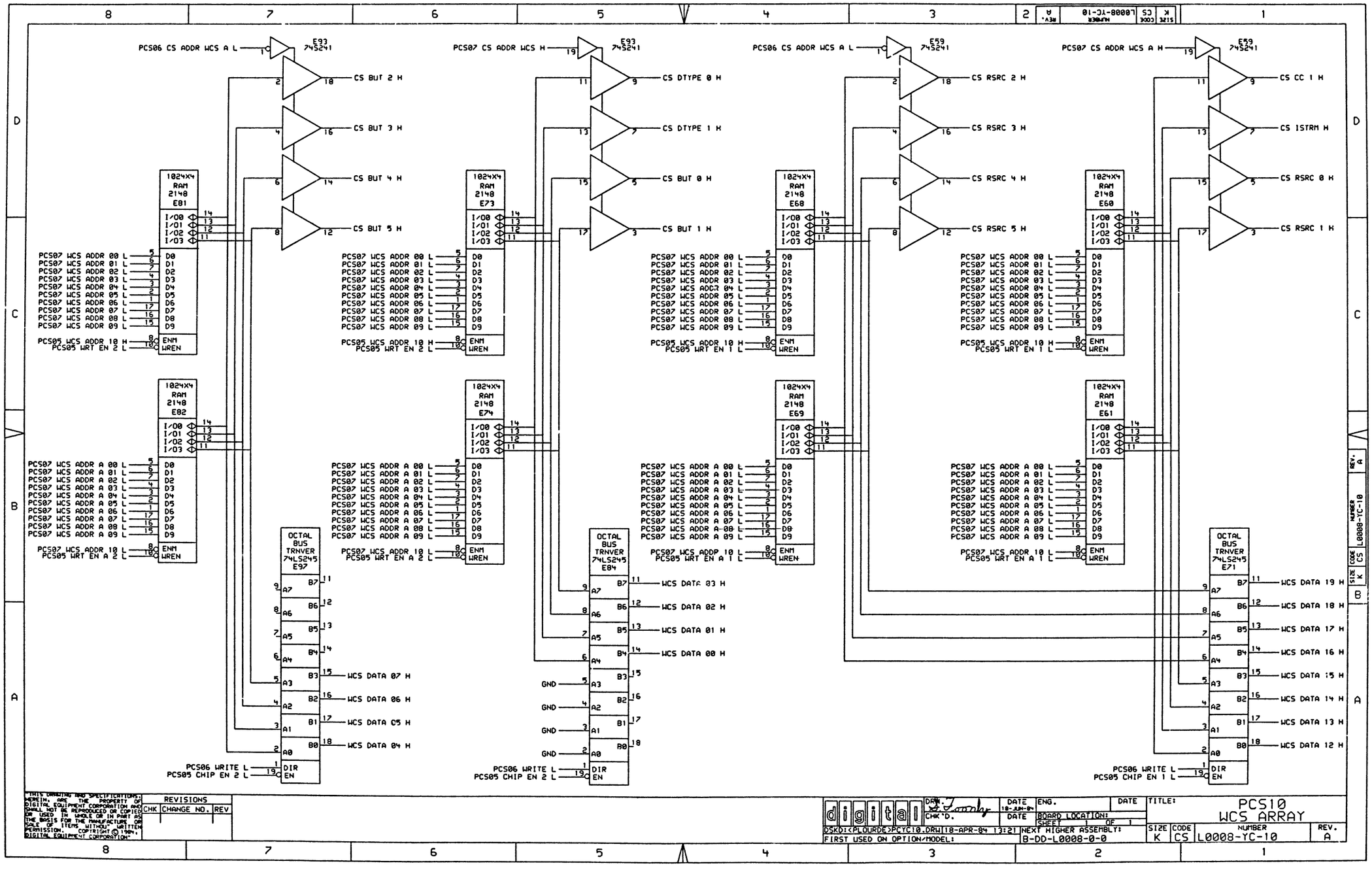
TITLE: PCS08 WCS ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-08	A



REVISIONS		
CHK	CHANGE NO.	REV

DRN: [illegible]	DATE 18-JUN-84	ENG.	DATE	TITLE: PCS09 WCS ARRAY
CHK D.	DATE	BOARD LOCATION: SHEET 1 OF 1		
QSKD: <PLOLRDE>PCYC09.DRW 18-APR-84 13:20		NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0		SIZE K · CODE CS · NUMBER L0008-YC-09 · REV. A
FIRST USED ON OPTION/MODEL:				



REVISIONS		
CHK	CHANGE NO.	REV

DRN		DATE 18-JUN-84	ENG.
CHK	D.	DATE	BOARD LOCATION:
			SHEET 1 OF 1

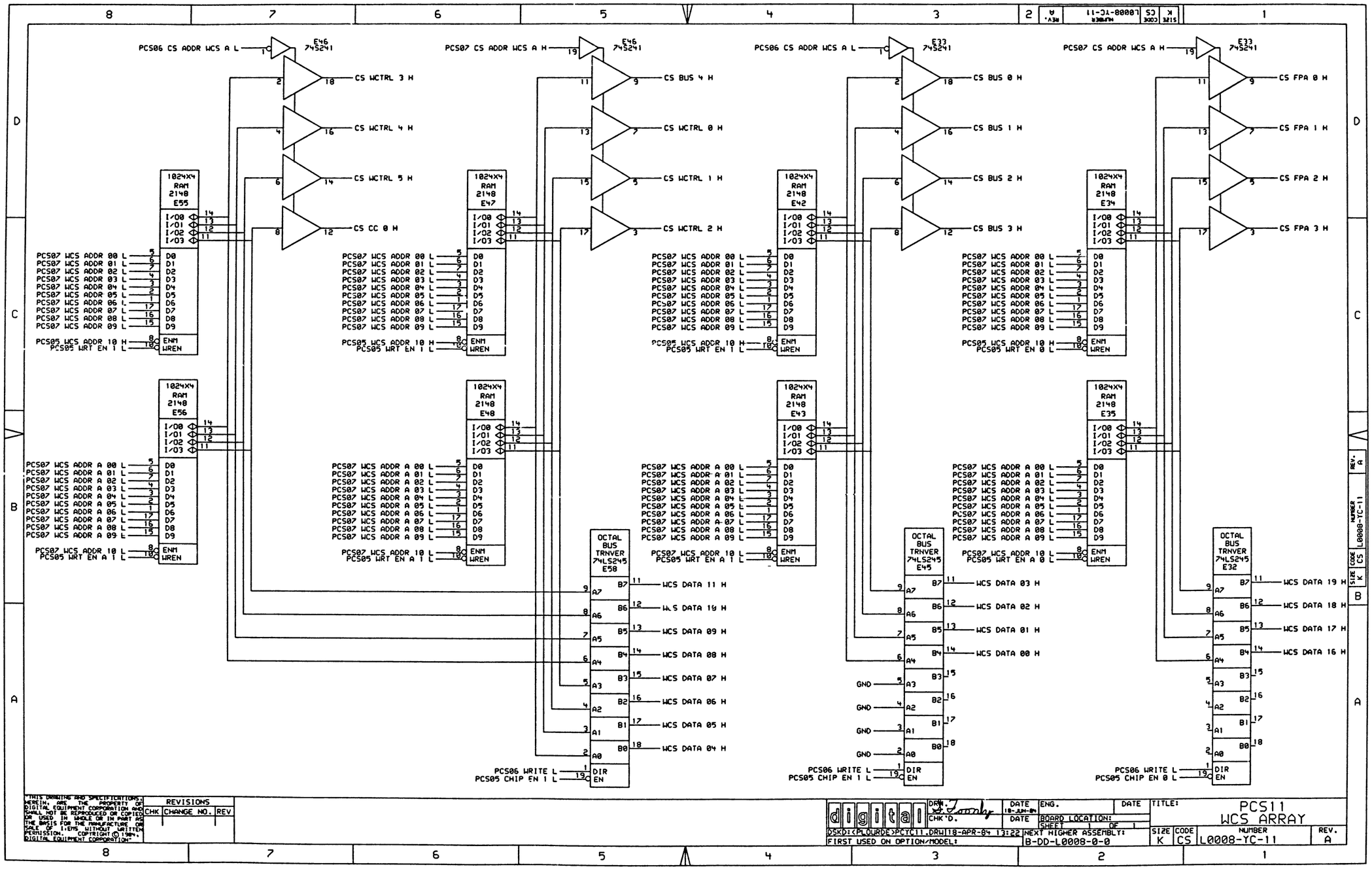
DSKD1:<PLOURDE>PCYC10.DRW;18-APR-84 13:21

FIRST USED ON OPTION/MODEL:

NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-10	A

TITLE: PCS10 WCS ARRAY



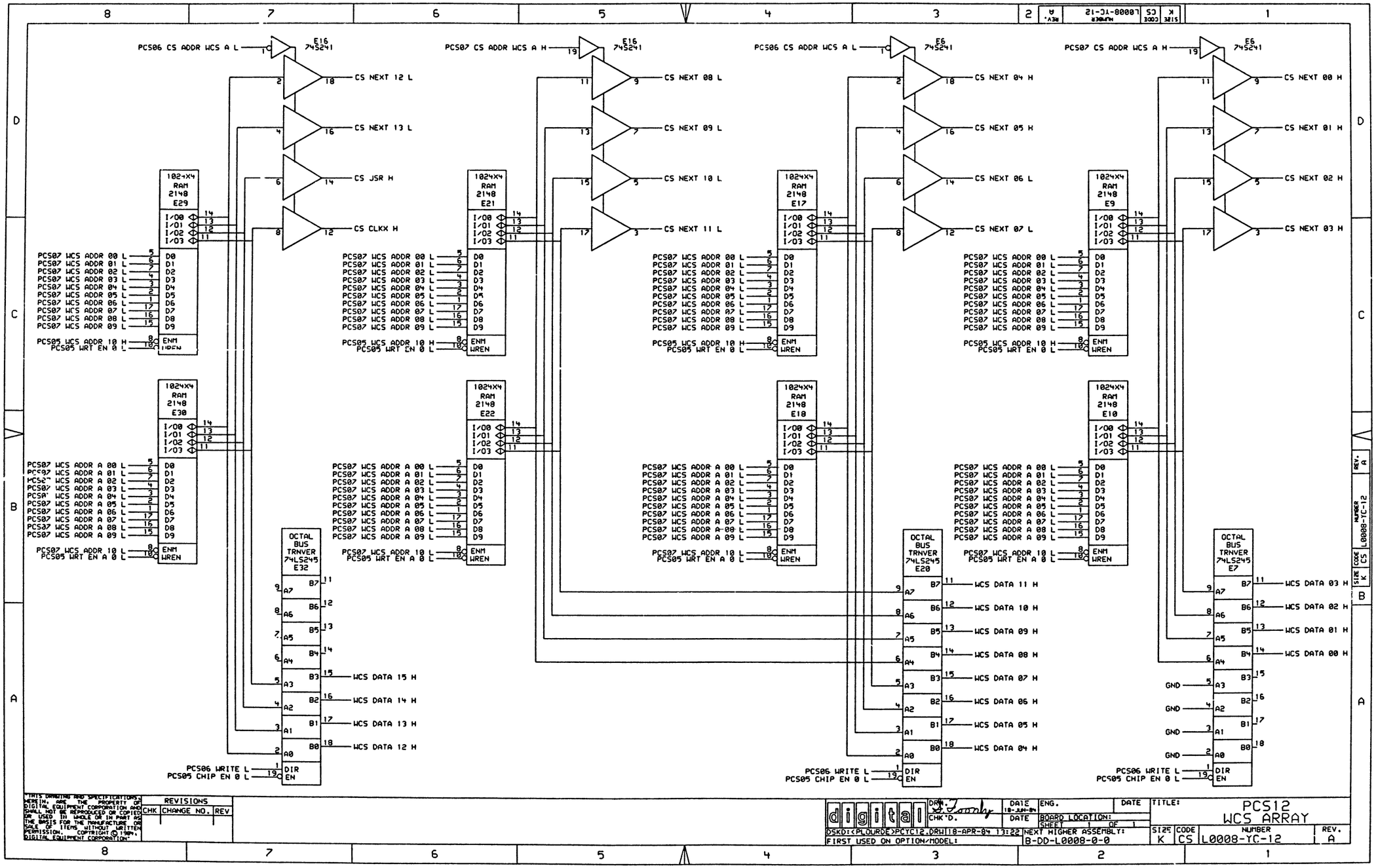
REVISIONS		
CHK	CHANGE NO.	REV

DRN: L.Landry	DATE: 18-JUN-84	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: SHEET 1 OF 1	

TITLE: PCS11 WCS ARRAY

OSKD:<PLOURDE>PCYC11.DRW|18-APR-84 13:22 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0 | FIRST USED ON OPTION/MODEL:

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-11	A


E16 74S241
PCS06 CS ADDR WCS A L
CS NEXT 12 L
CS NEXT 13 L
CS JSR H
CS CLKX H
1024X4 RAM 2148 E29
PCS07 WCS ADDR 00 L
PCS07 WCS ADDR 01 L
PCS07 WCS ADDR 02 L
PCS07 WCS ADDR 03 L
PCS07 WCS ADDR 04 L
PCS07 WCS ADDR 05 L
PCS07 WCS ADDR 06 L
PCS07 WCS ADDR 07 L
PCS07 WCS ADDR 08 L
PCS07 WCS ADDR 09 L
PCS05 WCS ADDR 10 H
PCS05 WRT EN 0 L
1024X4 RAM 2148 E30
PCS07 WCS ADDR A 00 L
PCS07 WCS ADDR A 01 L
PCS07 WCS ADDR A 02 L
PCS07 WCS ADDR A 03 L
PCS07 WCS ADDR A 04 L
PCS07 WCS ADDR A 05 L
PCS07 WCS ADDR A 06 L
PCS07 WCS ADDR A 07 L
PCS07 WCS ADDR A 08 L
PCS07 WCS ADDR A 09 L
PCS07 WCS ADDR 10 L
PCS05 WRT EN A 0 L
OCTAL BUS TRNVER 74LS245 E32
PCS06 WRITE L
PCS05 CHIP EN 0 L
WCS DATA 15 H
WCS DATA 14 H
WCS DATA 13 H
WCS DATA 12 H
E16 74S241
PCS07 CS ADDR WCS A H
CS NEXT 08 L
CS NEXT 09 L
CS NEXT 10 L
CS NEXT 11 L
1024X4 RAM 2148 E21
1024X4 RAM 2148 E22
OCTAL BUS TRNVER 74LS245 E33
WCS DATA 11 H
WCS DATA 10 H
WCS DATA 09 H
WCS DATA 08 H
E6 74S241
PCS06 CS ADDR WCS A L
CS NEXT 04 H
CS NEXT 05 H
CS NEXT 06 L
CS NEXT 07 L
1024X4 RAM 2148 E17
1024X4 RAM 2148 E18
OCTAL BUS TRNVER 74LS245 E20
WCS DATA 07 H
WCS DATA 06 H
WCS DATA 05 H
WCS DATA 04 H
E6 74S241
PCS07 CS ADDR WCS A H
CS NEXT 00 H
CS NEXT 01 H
CS NEXT 02 H
CS NEXT 03 H
1024X4 RAM 2148 E9
1024X4 RAM 2148 E10
OCTAL BUS TRNVER 74LS245 E7
GND
WCS DATA 03 H
WCS DATA 02 H
WCS DATA 01 H
WCS DATA 00 H
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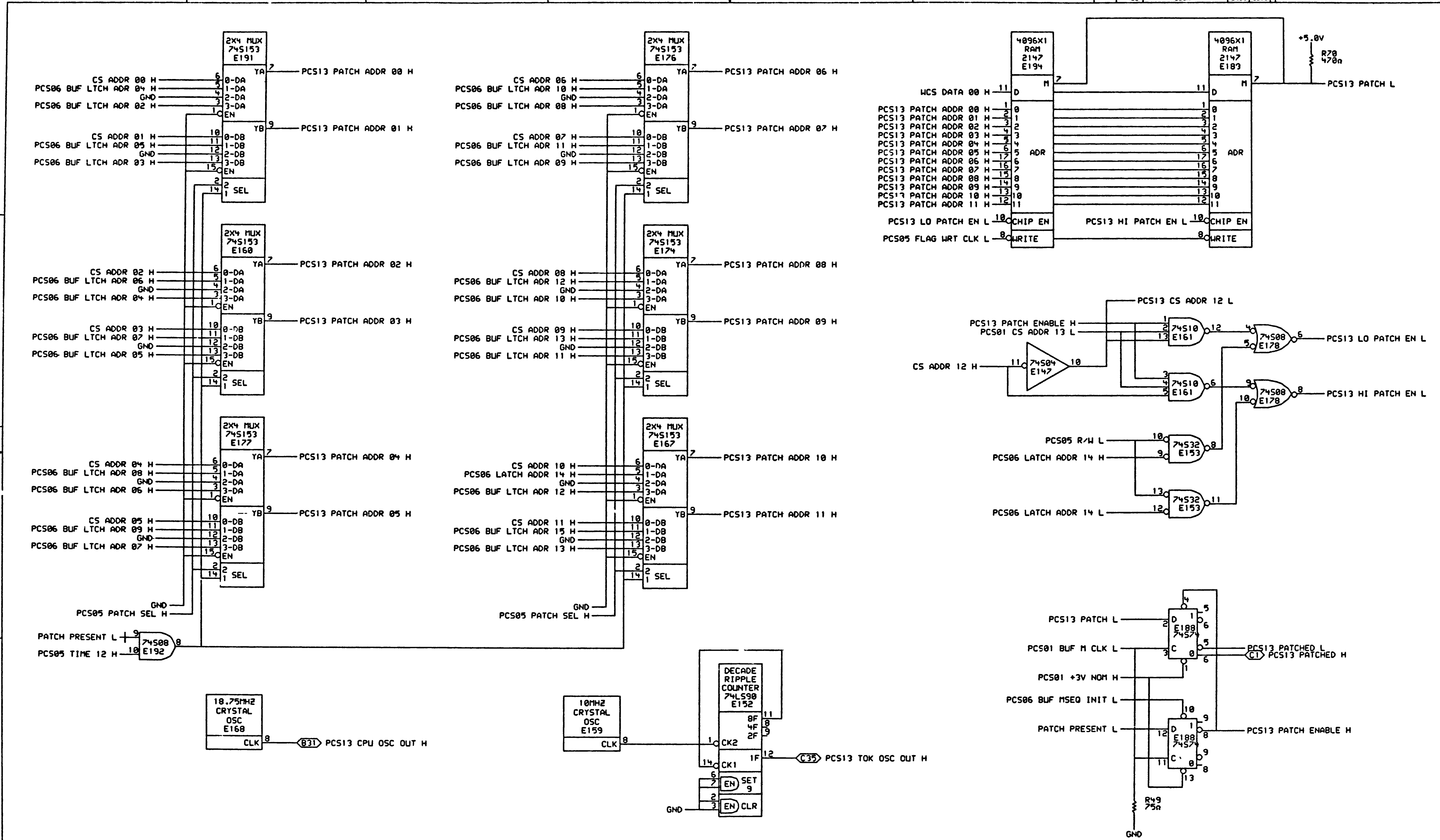
REVISIONS
CHK | CHANGE NO. | REV
digital
DRN D.Toomey
DATE 18-JUN-84
ENG.
DATE
CHK *D.
DATE
BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCYC12.DRW 18-APR-84 13:22
NEXT HIGHER ASSEMBLY:
FIRST USED ON OPTION/MODEL:
B-DD-L0008-0-0
TITLE: PCS12 WCS ARRAY
SIZE K
CODE CS
NUMBER L0008-YC-12
REV. A



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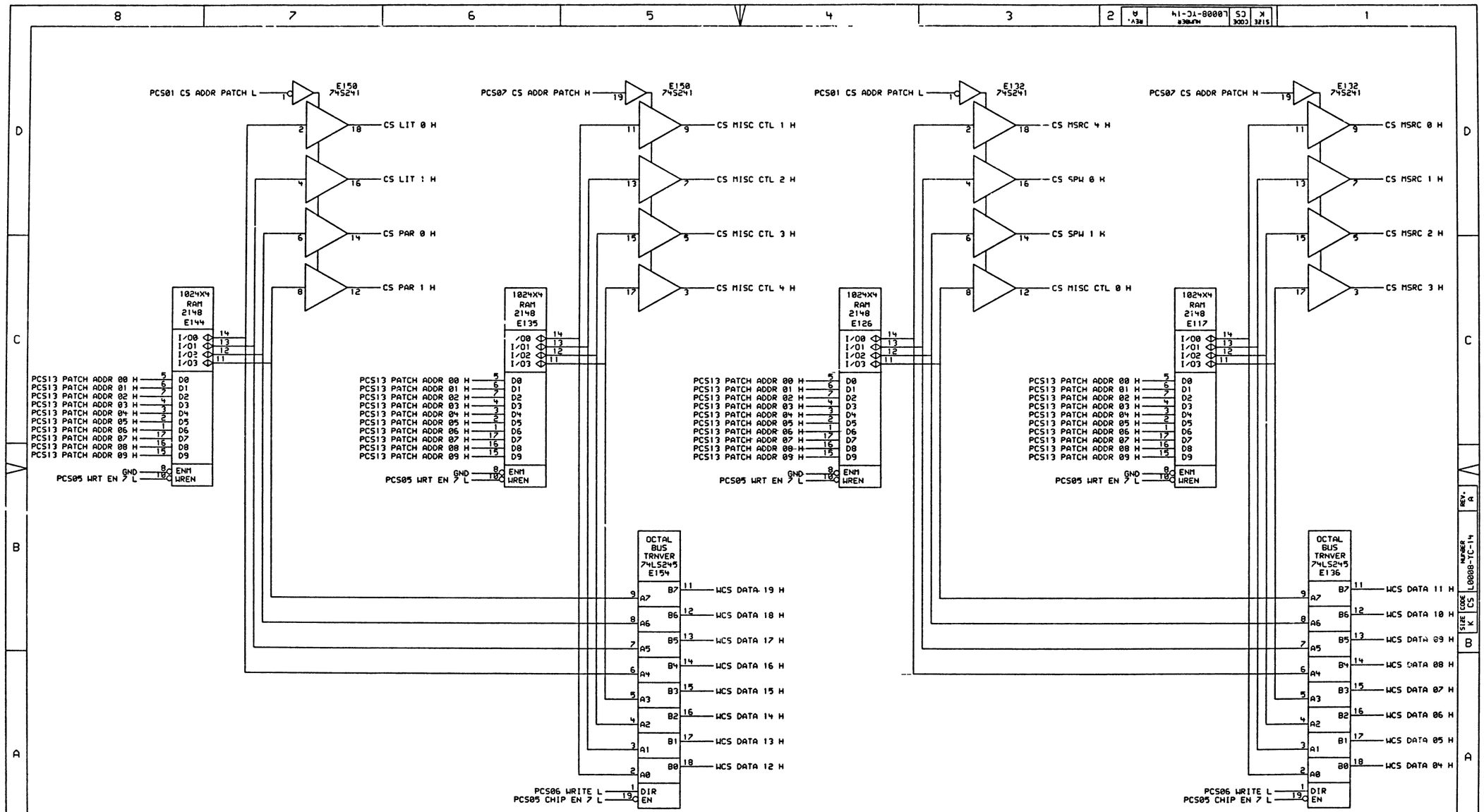
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN	DATE 18-JUN-84	ENG.	DATE	TITLE: PCS13 PATCH ADDRESS
CHK'D.	DATE	BOARD LOCATION:		
		SHEET 1 OF 1		
DSKD:<PLOURDE>PCYC13.DRW	18-APR-84 13:24	NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0		
FIRST USED ON OPTION/MODEL:				

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-13	B

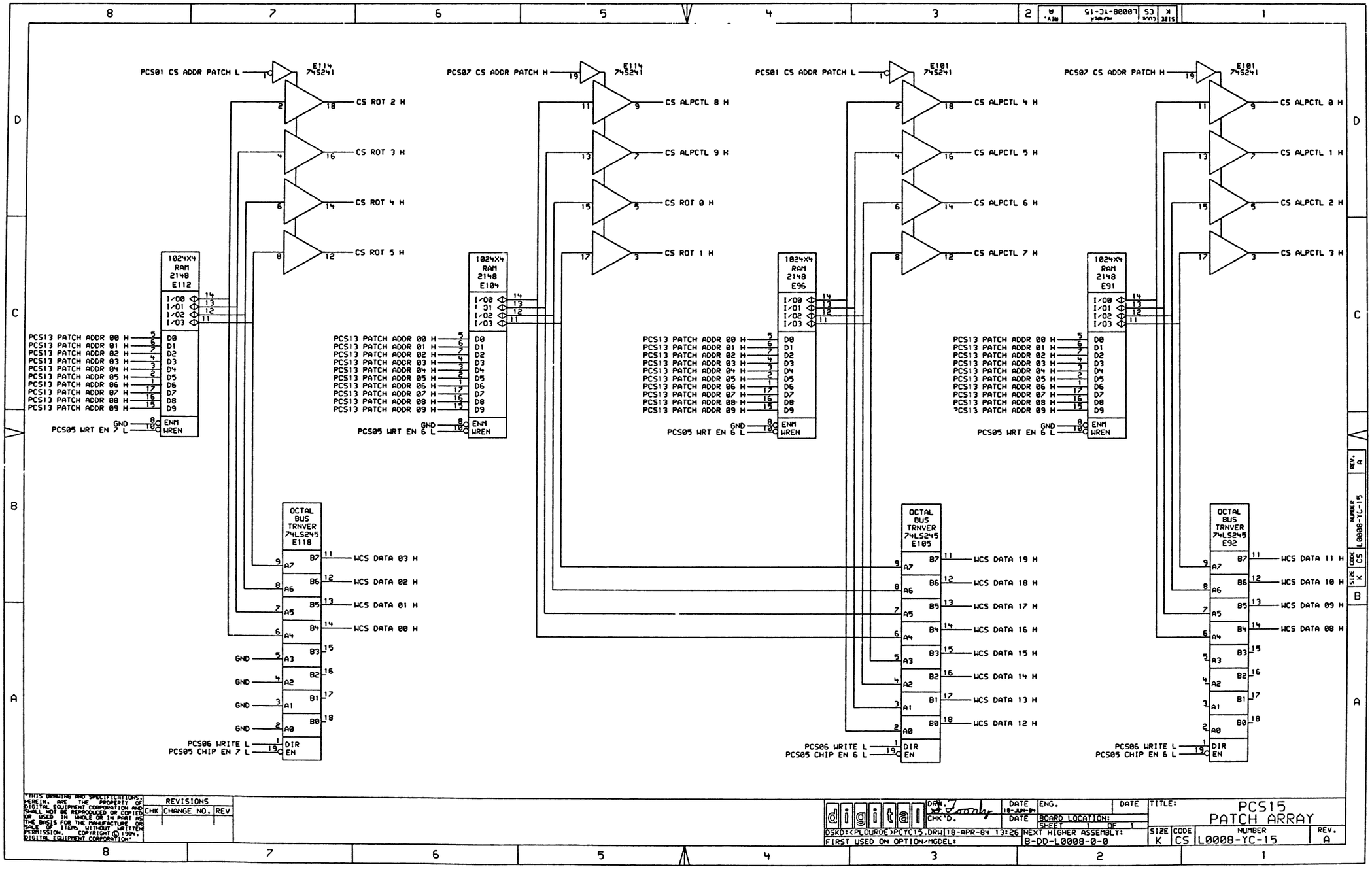


REVISIONS		
CHK	CHANGE NO.	REV

DRW: J. Landry
CHK'D.
DATE 18-JUN-84
ENG.
DATE
BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCYC14.DRW;18-APR-84 13:25
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS14 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-14	A



REVISIONS		
CHK	CHANGE NO.	REV

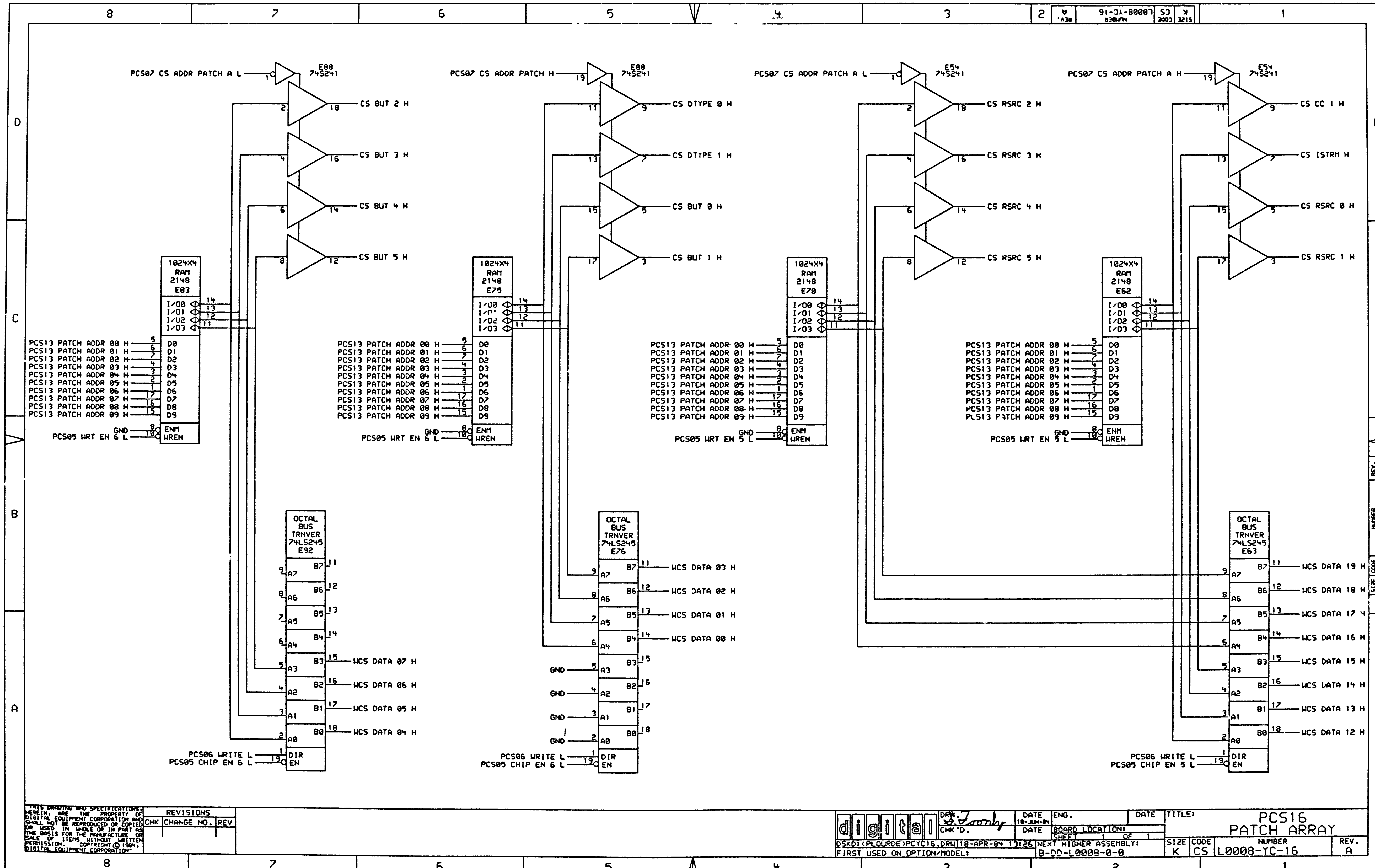
digital

DSKD:<PLOURDE>PCYC15.DRW 18-APR-84 13:26
FIRST USED ON OPTION/MODEL:

DRN T. Landry DATE 18-APR-84 ENG. DATE
CHK D. DATE BOARD LOCATION:
SHEET 1 OF 1
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

TITLE: PCS15 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-15	A



PCS07 CS ADDR PATCH A L
E88 74S241
CS BUT 2 H
CS BUT 3 H
CS BUT 4 H
CS BUT 5 H
1024X4 RAM 2148 E83
OCTAL BUS TRNVER 74LS245 E92
WCS DATA 07 H
WCS DATA 06 H
WCS DATA 05 H
WCS DATA 04 H
PCS06 WRITE L
PCS05 CHIP EN 6 L
PCS05 WRT EN 6 L
PCS07 CS ADDR PATCH H
CS DTYPE 0 H
CS DTYPE 1 H
CS BUT 0 H
CS BUT 1 H
1024X4 RAM 2148 E75
OCTAL BUS TRNVER 74LS245 E76
WCS DATA 03 H
WCS DATA 02 H
WCS DATA 01 H
WCS DATA 00 H
E54 74S241
CS RSRC 2 H
CS RSRC 3 H
CS RSRC 4 H
CS RSRC 5 H
1024X4 RAM 2148 E70
PCS05 WRT EN 5 L
PCS07 CS ADDR PATCH A H
CS CC 1 H
CS ISTRM H
CS RSRC 0 H
CS RSRC 1 H
1024X4 RAM 2148 E62
OCTAL BUS TRNVER 74LS245 E63
WCS DATA 19 H
WCS DATA 18 H
WCS DATA 17 H
WCS DATA 16 H
WCS DATA 15 H
WCS DATA 14 H
WCS DATA 13 H
WCS DATA 12 H
PCS06 WRITE L
PCS05 CHIP EN 5 L
PCS13 PATCH ADDR 00 H
PCS13 PATCH ADDR 01 H
PCS13 PATCH ADDR 02 H
PCS13 PATCH ADDR 03 H
PCS13 PATCH ADDR 04 H
PCS13 PATCH ADDR 05 H
PCS13 PATCH ADDR 06 H
PCS13 PATCH ADDR 07 H
PCS13 PATCH ADDR 08 H
PCS13 PATCH ADDR 09 H
GND
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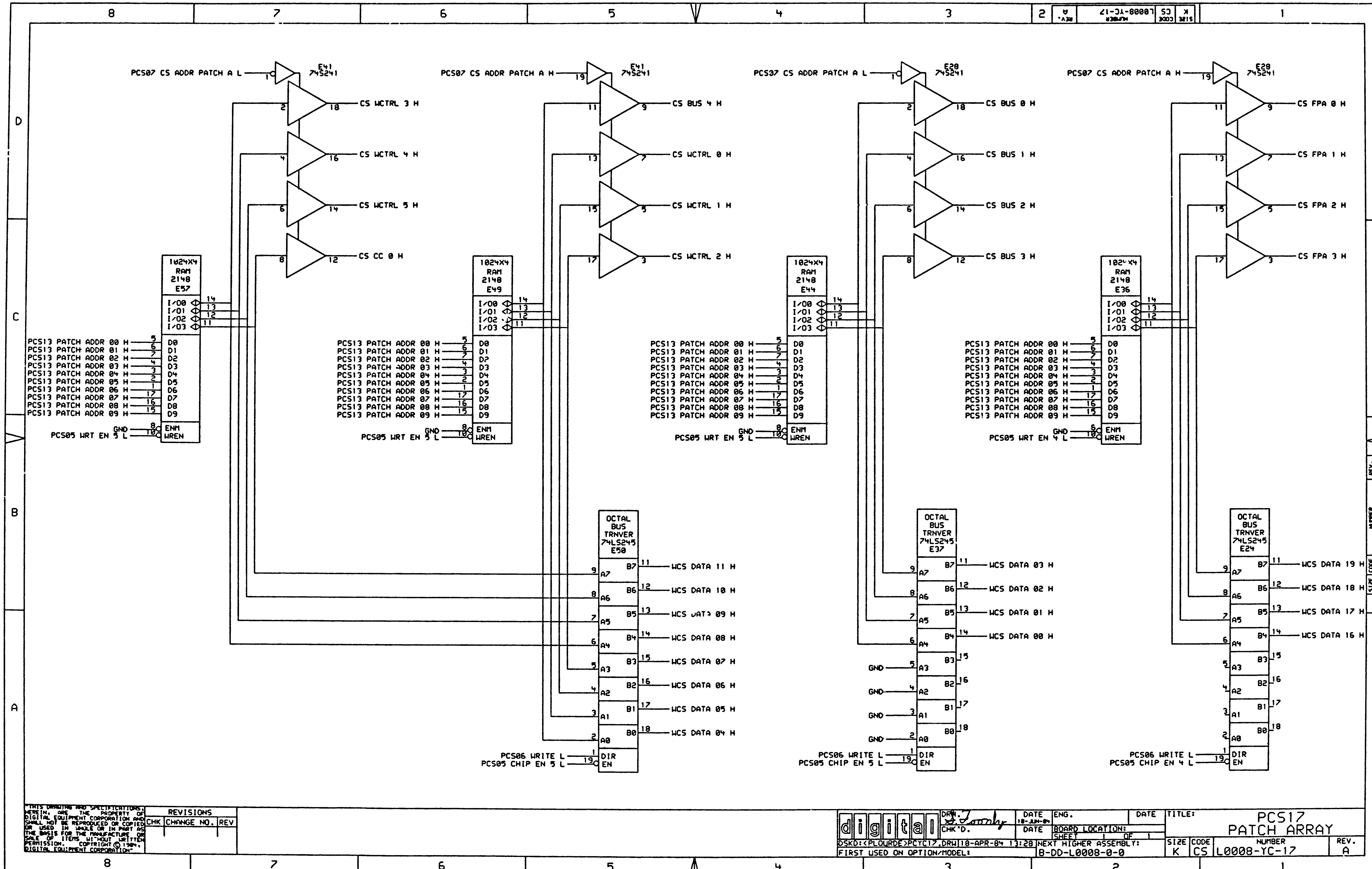
REVISIONS
CHK CHANGE NO. REV
digital
DSKD:<PLOURDE>PCTC16.DRW|18-APR-84 13:26
FIRST USED ON OPTION/MODEL:
NEXT HIGHER ASSEMBLY:
B-DD-L0008-0-0
TITLE:
PCS16
PATCH ARRAY
SIZE K CODE CS NUMBER L0008-YC-16 REV. A


PCS07 CS ADDR PATCH A L
E41 74S241
PCS07 CS ADDR PATCH A H
E28 74S241
CS WCTRL 3 H
CS WCTRL 4 H
CS WCTRL 5 H
CS CC 0 H
CS BUS 4 H
CS WCTRL 0 H
CS WCTRL 1 H
CS WCTRL 2 H
CS BUS 0 H
CS BUS 1 H
CS BUS 2 H
CS BUS 3 H
CS FPA 0 H
CS FPA 1 H
CS FPA 2 H
CS FPA 3 H
1024X4 RAM 2148 E57
1024X4 RAM 2148 E49
1024X4 RAM 2148 E44
1024X4 RAM 2148 E36
I/O0 I/O1 I/O2 I/O3
D0 D1 D2 D3 D4 D5 D6 D7 D8 D9
ENM WREN
PCS13 PATCH ADDR 00 H
PCS13 PATCH ADDR 01 H
PCS13 PATCH ADDR 02 H
PCS13 PATCH ADDR 03 H
PCS13 PATCH ADDR 04 H
PCS13 PATCH ADDR 05 H
PCS13 PATCH ADDR 06 H
PCS13 PATCH ADDR 07 H
PCS13 PATCH ADDR 08 H
PCS13 PATCH ADDR 09 H
GND
PCS05 WRT EN 5 L
PCS05 WRT EN 4 L
OCTAL BUS TRNVER 74LS245 E50
OCTAL BUS TRNVER 74LS245 E37
OCTAL BUS TRNVER 74LS245 E24
A0 A1 A2 A3 A4 A5 A6 A7
B0 B1 B2 B3 B4 B5 B6 B7
DIR EN
WCS DATA 11 H
WCS DATA 10 H
WCS DATA 09 H
WCS DATA 08 H
WCS DATA 07 H
WCS DATA 06 H
WCS DATA 05 H
WCS DATA 04 H
WCS DATA 03 H
WCS DATA 02 H
WCS DATA 01 H
WCS DATA 00 H
WCS DATA 19 H
WCS DATA 18 H
WCS DATA 17 H
WCS DATA 16 H
PCS06 WRITE L
PCS05 CHIP EN 5 L
PCS05 CHIP EN 4 L
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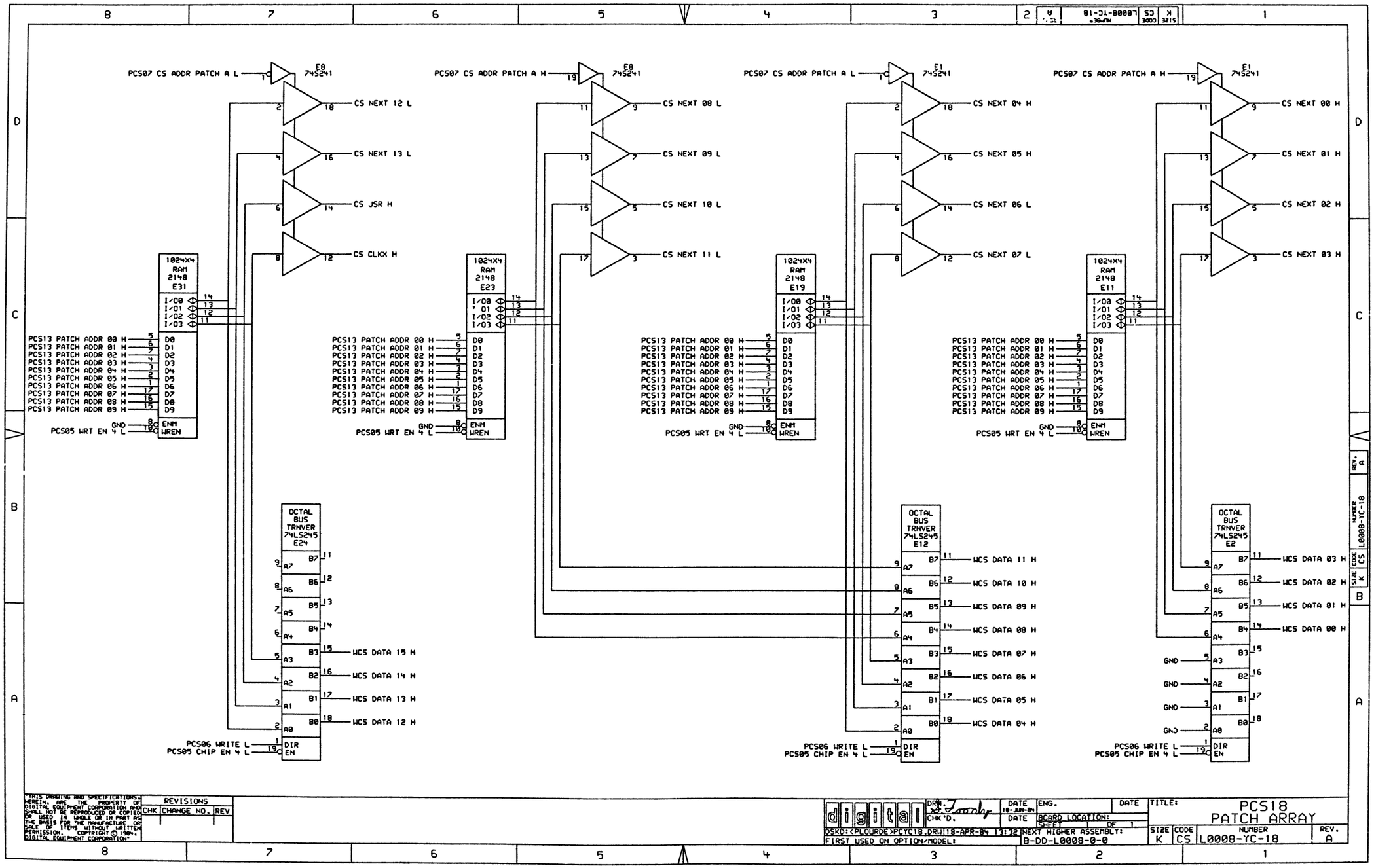
REVISIONS
CHK CHANGE NO. REV
digital
DATE 18-JUN-84
BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCYC17.DRW|18-APR-84 13:28
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:
TITLE: PCS17 PATCH ARRAY
SIZE K CODE CS NUMBER L0008-YC-17 REV. A



REVISIONS

CHK	CHANGE NO.	REV

digital

DRN: Jacoby | DATE: 18-JUN-84 | ENG. | DATE

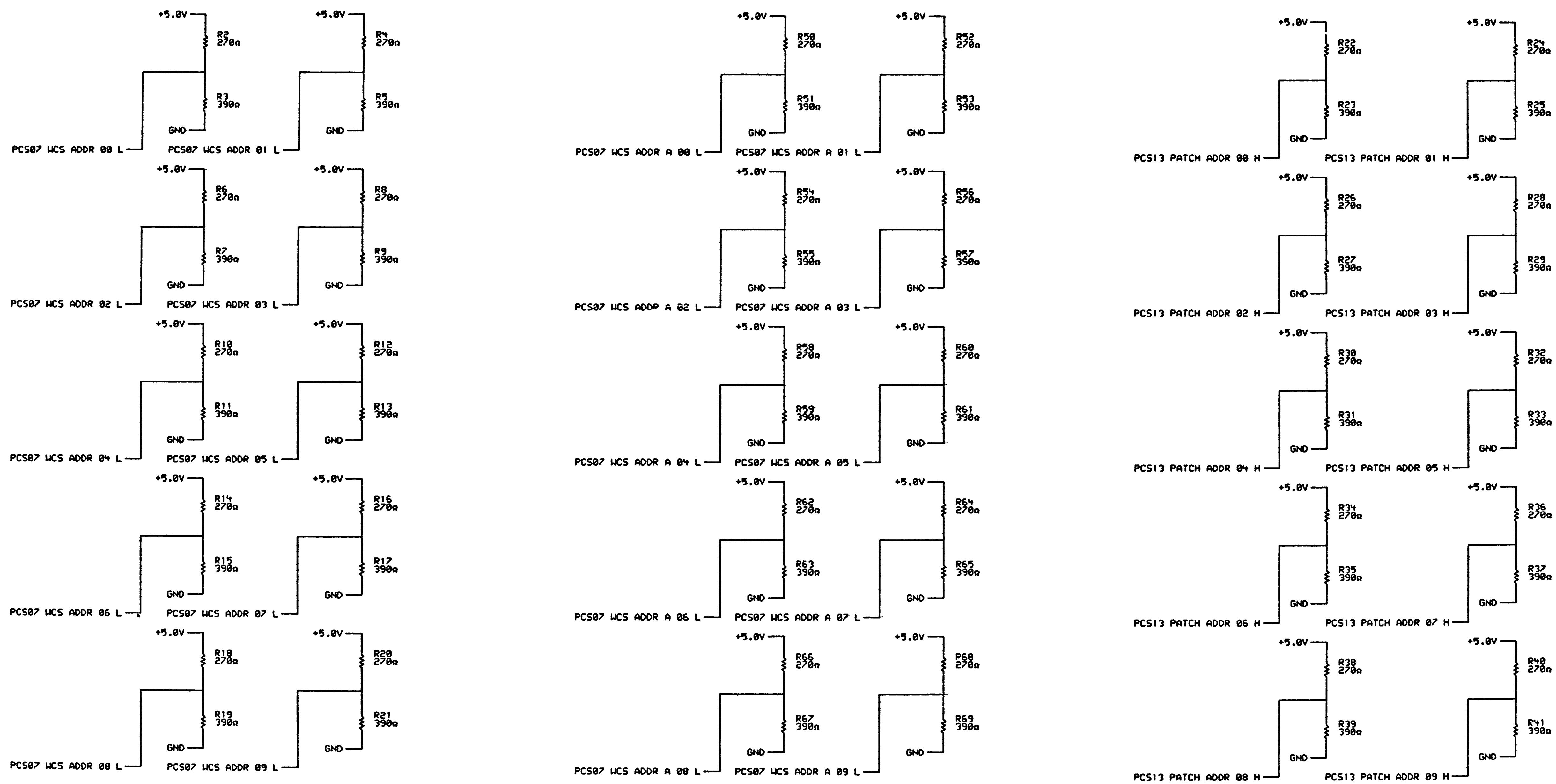
CHK: D. | DATE | BOARD LOCATION: | SHEET 1 OF 1

DSKD:<PLOURDE>PCYC18.DRW 18-APR-84 13:32 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

TITLE: PCS18 PATCH ARRAY

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-18	A



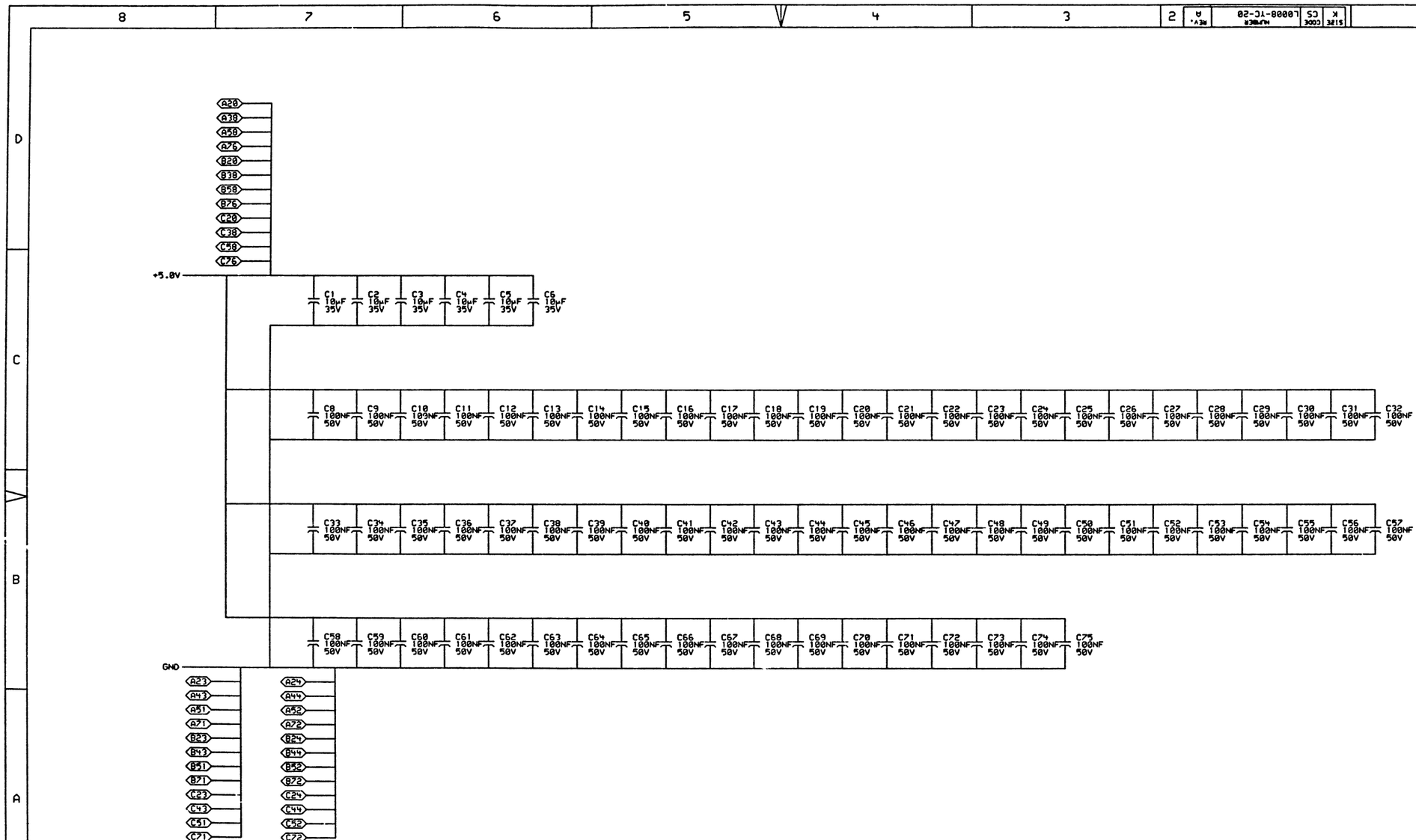
REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. DATE 18-JUN-84 | ENG. DATE
CHK'D. DATE | BOARD LOCATION:
SHEET 1 OF 1
DSKD:<PLOURDE>PCYC19.DRW 18-APR-84 13:32
NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0
FIRST USED ON OPTION/MODEL:

TITLE: PCS19 TERMINATORS

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-19	A



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. Tooley 18-APR-84 | ENG. | DATE | TITLE: PCS20

CHK'D. | DATE | BOARD LOCATION: | SHEET 1 OF 1

DSKD:<PLOURDE>PCYC20.DRW|18-APR-84 13:38 | NEXT HIGHER ASSEMBLY: B-DD-L0008-0-0

FIRST USED ON OPTION/MODEL:

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-20	A

SIZE	CODE	NUMBER	REV.
K	CS	L0008-YC-20	A

SIZE	CODE	NUMBER	REV.
B	DD	M9313-0	C

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
		M9313	PART REVISION	A B C
B-DD-M9313-0	1		UET DRAWING DIRECTORY	A B C
D-UA-M9313-0-0	3		UET UNIT ASSEMBLY	A A A
K-PL-M9313-0-DBP	2		UET PARTS LIST	A B C
D-MD-5013847-0-0	5		UET DRILL & ETCH DRAWINGS	A A A
		5013847	ETCHED BOARD	B B B
K-PC-M9313-0-DBC			UET P C DESIGN DATA BASE CALDEC	B B B
K-CS-M9313-0-DBS			UET DESIGN DATA BASE SUDS	A A A
D-CS-M9313-0-1	1	*	DATA PATH (7:0)	A A A
D-CS-M9313-0-2	1	*	DATA PATH (15:8)	A A A
D-CS-M9313-0-3	1	*	ADDRESS SELECTION	A A A
D-CS-M9313-0-4	1	*	UNIBUS CONTROL	A A A
D-CS-M9313-0-5	1	*	INTERRUPT CONTROL	A A A
D-CS-M9313-0-6	1	*	UNIBUS TERMINATION	A A A
D-CS-M9313-0-7	1	*	FORWARD REFERENCE	A A A
D-CS-M9313-0-8	1	*	FORWARD REFERENCE	A A A

NOTES:

*CONTROL SOURCE IS THE SUDS DATA BASE
NO CONTROLLED PAPER ORIGINALS EXIST.

REVISIONS	REV.	B	C
	CHG NO.	TW001	TW002
	DATE		11/84

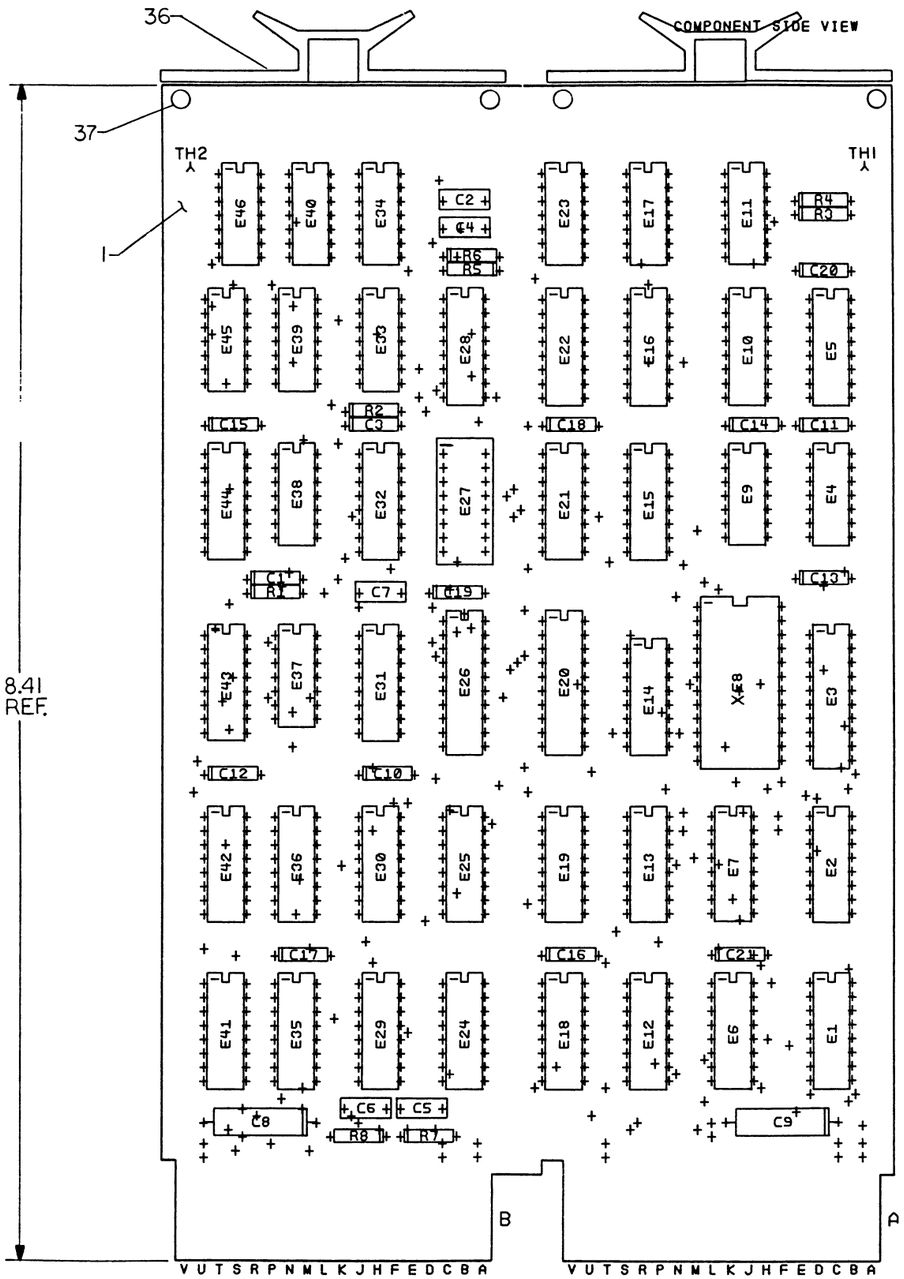
digital

USED ON OPTION/MODEL	
11/750	

DRN.	M. FUNARO
CHK'D	J. CASEY
ENG.	R. ARMSTRONG
PROD.	J. CONSIDINE

TITLE			
UET			
SIZE	CODE	NUMBER	REV.
B	DD	M9313-0	C
SHEET 1 OF 1			

DRB 126



NOTES:

STEP & REPEAT	↑ Y AXIS	STEP TIMES
	→ X AXIS	STEP TIMES

CHK	CHANGE NO	REV

ETCH REV. B

SIGNATURES	DATE
DRN Suzi Toms	7-27-79
CHK'D. E.T.GERRY	7-31-79
MECH.ENG. Bob Armstrong	3-21-80
PROJ.ENG. Jaque Cane	3-21-80
PROD. [illegible]	3-20-80
SCALE 2:1	
SHT. 1 OF 3	
NEXT HIGHER ASSY. B-DD-M9313-0	

digital

TITLE UET

SIZE	CODE	NUMBER	REV
D	UA	M9313-0-0	A

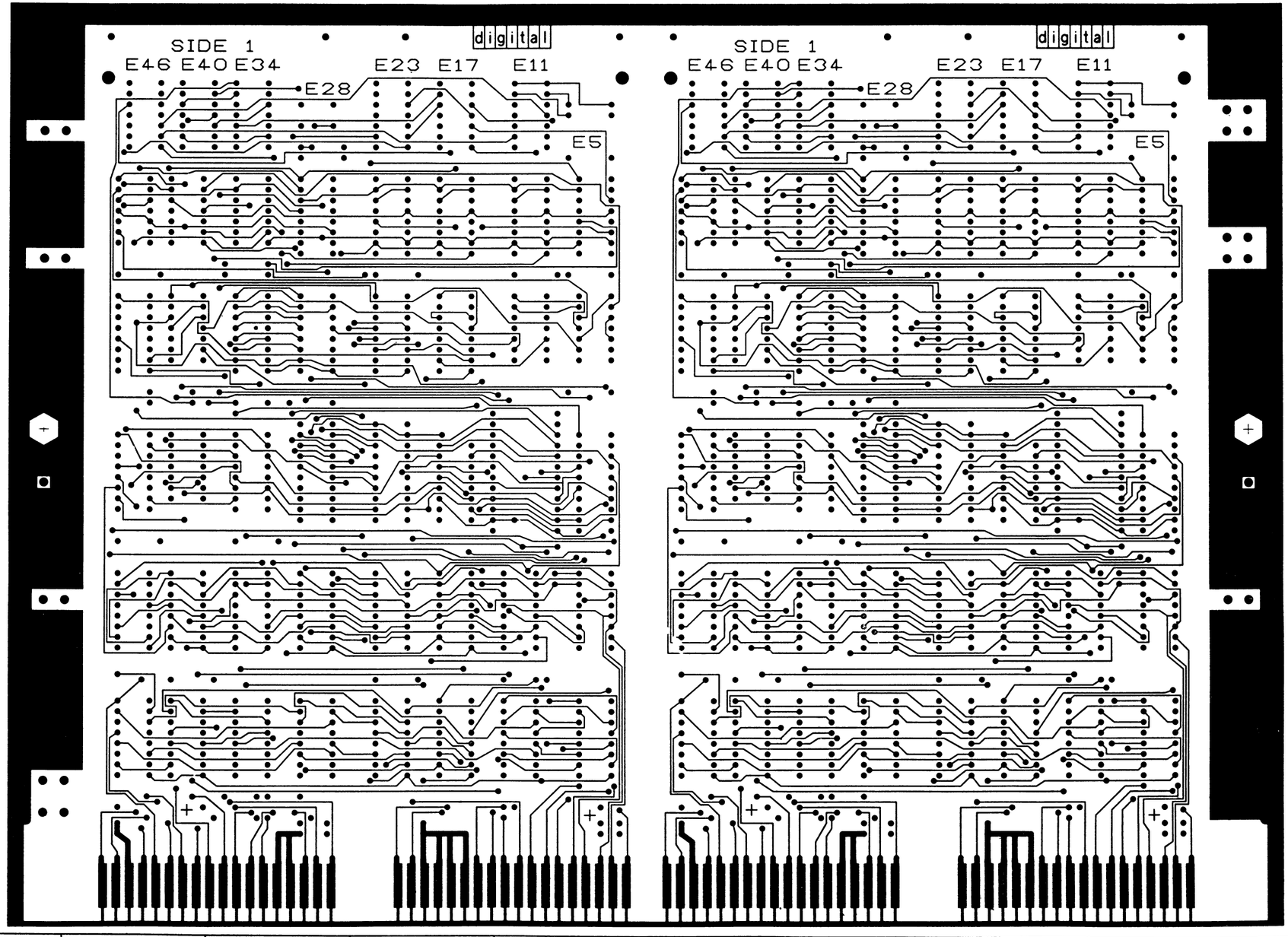
DUA M9313-0-0 A

MS# 170124B

5013847B M9313

D UA M9313 - 0 - 0 A

LAYER 1



D UA M9313 - 0 - 0 A

REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV.
UET	D	UA	M9313 - 0 - 0	A
SCALE 2 - 1	SHEET 2 OF 3	DIST.		

LAYER H

REVISIONS		
CHK	CHANGE NO	REV

TITLE	SIZE	CODE	NUMBER	REV.
UET	D	UA	M9313 - 0 - 0	A
SCALE 2 - 1	SHEET 3 OF 3	DIST.		

DUA M9313 - 0 - 0 A

LINE	ITEM	TOP DOCUMENT	PART NUMBER	MIN REV	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
					VARIATION REVISION LEVEL:	C1	
1	1		5013847-00		VET	1	
2	2		1215006-06		SKT,IC 24PIN DIP TIN SOLD	1	XE8
3	3		1300005-04		R NETWORK 15-470 5.0 % 16PIN	1	E27
4	4		1300202-00		47.0 .25 W 5.0 % CF	1	R2
5	5		1300229-00		100.0 .25 W 5.0 % CF	3	R1,R3,R4
6	6		1312628-00		R NETWORK 14-176.5 14-375 16PIN	2	E2,E42
7	7		1312628-01		R NETWORK 14-176.5 11-375 16PIN	2	E12,E29
8	8		1910389-00		DEC 7314 NOR GATE-SINGLE 7IN,	1	E37
9	9		1909705-00		DEC 8881 NAND GATE-QUAD 2IN O	1	E9
10	10		1910436-00		DEC 74123 ONE SHOT-DUAL,RETRIG	1	E28
11	11		1911469-00		DEC 8640 RECEIVER,BUS,QUAD,U	1	E4
12	12		1911579-00		8641 TRANSCEIVER,BUS,QUA	10	E1,E7,E18,E19,E30,E31,E35,E36, CONT E41,E44
13	13		1911983-00		74S133 NAND GATE-POSITIVE 1	1	E43
14	14		1912799-00		LS00 NAND-GATE-QUAD 2IN,P	1	E40
15	15		1912803-00		LS04 INVERTER GATE,HEX	2	E17,E39
16	16		1910535-00		74S05 INVERTER GATE-HEX 1	1	E33
17	17		1912805-00		LS08 AND GATE-QUAD 2IN,PO	1	E46
18	18		1912808-00		LS11 AND GATE-TRIPLE 3IN	1	E34
19	19		1912810-00		LS20 NAND GATE-DUAL 4IN	1	E23
20	20		1912824-00		LS74 FF-D DUAL,EDGE TRIGG	2	E38,E45
21	21		1912853-00		LS175 FF-D QUAD	1	E21
22	22		1914214-00		LS374 FF-D OCTAL EDGE TRIG	2	E3,E26
23	23		1914438-00		DC 013 UNIBUS INTERRRUPT-BIP	5	E5,E10,E15,E16,E22
24	24		1914845-00		2918 FF-D QUAD TRI-STATE	5	E6,E13,E14,E24,E25
25	25		23272A1-00		A1-03,A1-04,A1-05	1	E32
26	26		1000055-00		2200.0 MMF 250V 20% Y5S DISC	2	C2,C4
27	27		1000043-00		1000.0 MMF 250V 20% Y5F DISC	2	C5,C6
28	28		1001610-01		.01 MFD50/100V +80-20% DISC	1	C7
29	29		1611243-00		DELAY=25-250NS,10TAPS RCL#L-183	1	E11

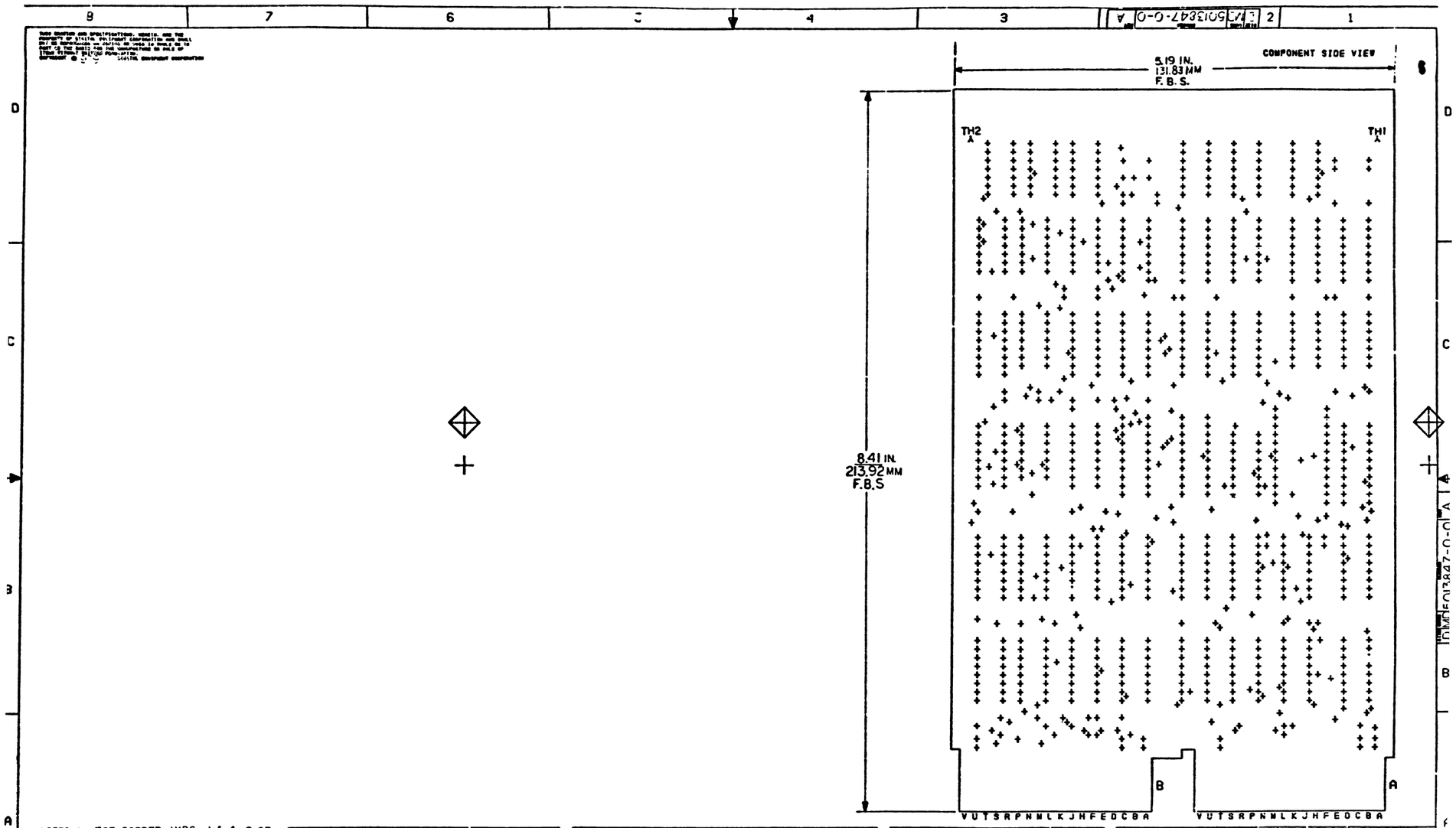
REVISION HISTORY			BASIC PART NO: M9313
ENG	ECO NUMBER	REV	SECTION A OF A
---	INITIAL	A	SECTION.VARIATION INDEX
SB	M9312-TW001	B	[A] 00
SF	M9313-TW002	C	[B]
			[C]
			[D]
			[E]
			[F]
			[H]
			[J]
			[K]
			[L]
			[M]
			[N]

DRN: M.FUNARO	DATE: 22-MAY-79	D I G I T A L	
CHK'D: F.GAROFALO	DATE: 22-MAY-79	TITLE PARTS LIST UET	
DES.ENG: B.ARMSTRONG	DATE: 22-MAY-79	DOCUMENT NUMBER	
RESP.ENG.: B.ARMSTRONG	DATE: 22-MAY-79	SIZE: K / CODE: PL / NUMBER: M9313-0-DBP	REV: C
MFG.ENG.: K.O'BRIEN	DATE: 13-FEB-80	RELEASE DATE: 15-NOV-84	
ASSEMBLY NUMBER: D-UA-M9313-0-0	TOP DOCUMENT NUMBER: B-DD-M9313-0-0	FILE NAME: Z1259C.PLS	EDIT #: 17

LINE	ITEM	TOP DOCUMENT	PART NUMBER	MIN REV	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
					VARIATION REVISION LEVEL:	C1	
30	30		1913777-00		LS240 DRIVER,LINE,OCTAL,T	1	E20
31	31		1302394-00		30.0 K .25 W 5.0 % CF	2	R5,R6
32	32		1305125-00		383.0 .25 W 1.0 % RN55D-F10	2	R7,R8
33	33		1012784-00		.047 MFD 50V +80-20% CER	12	C10-C21
34	34	SEE NOTES	1012084-01		8 MFD 25V +75-10% AL EL	2	C8,C9
35	35		1000024-00		470.0 MMF 100V 5%200PPM MICA	2	C1,C3
36	36		9008337-06		HANDLE, FLIP CHIP, MAGENTA	2	
37	37		9000024-01		EYELET,ROLLED 0.1210DX0.192	4	

38 NOTE: SOME MODULES WILL HAVE 10-05306 INSTEAD OF 10-12084-01

DIGITAL	TITLE UET	SECTION A OF A	SIZE K	CODE PL	DOCUMENT NUMBER M9313-0-DBP	REV C



NOTES: 1. .5OZ. COPPER LYRS. 1 & 4, 2 OZ. COPPER LYRS 2&3.
2. STEP & REPEAT CODE: 2ML2

STEP & REPEAT	+ Y AXIS ___ STEP ___ TIMES
	→ X AXIS 2.25 STEP 1 TIMES

CHK CHANGE NO.	REV

DIMENSIONAL TOLERANCE
INCHES
XXX = ±.005
XX = ±.020
X = ±.040
ANGLE = ±0° 30'

HOLE DATA

SYMBOL	+	A	X	◆	Z	M	Δ	□	⊕	⅋
MIN HOLE SIZE	.038	.141								
PLATED	X									
NON PLATED		CPT								
QTY.	994	2								
◯=OFF GRD HLE										
DRILL SIZE										

.025 GRID UNLESS INDICATED

BOARD FABRICATION INFORMATION

BOARD SIZE DOUBLE	5.5
BOARD DATA DWG.	8E-MD-1606166-0-C
BOARD MATL	FL-GF-[illegible]22-E /SEE NOTE 1
DEC PS - [illegible]	1400006-GS
QTY. OF LAYERS	4
PTH ✓	PRINT AND ETCH
SOLDER MASK	SIDE 2 ✓ BOTH SIDES
GOLD CONTACTS	BOTTOM ✓ TOP

SIGNATURES	DATE
DRN. [illegible]	[illegible]
CHK'D. [illegible]	[illegible]
MECH. ENG. [illegible]	6-7-79
PROJ. ENG. [illegible]	6-7-79
PROD.	

SCALE 2:1

SHT. 1 OF 5

NEXT HIGHER ASSY. D-UA-[illegible]9313-0-0

digital

TITLE DRILL AND ETCH DRAWING

SIZE	CODE	NUMBER	REV
D	MD	5013847-0-C	A

ETCH REV. B

1 MS# 170246

5013847B M9313

5013847B M9313

LAYER 1

SIDE 1
E46 E40 E34 E28 E23 E17 E11 E5

digital

SIDE 1
E46 E40 E34 E28 E23 E17 E11 E5

digital

DRILL & ETCH DRAWING

DMD 5013847 - 0 - 0 A

DMD 5013847 - 0 - 0 A

5013847B M9313

LAYER 2

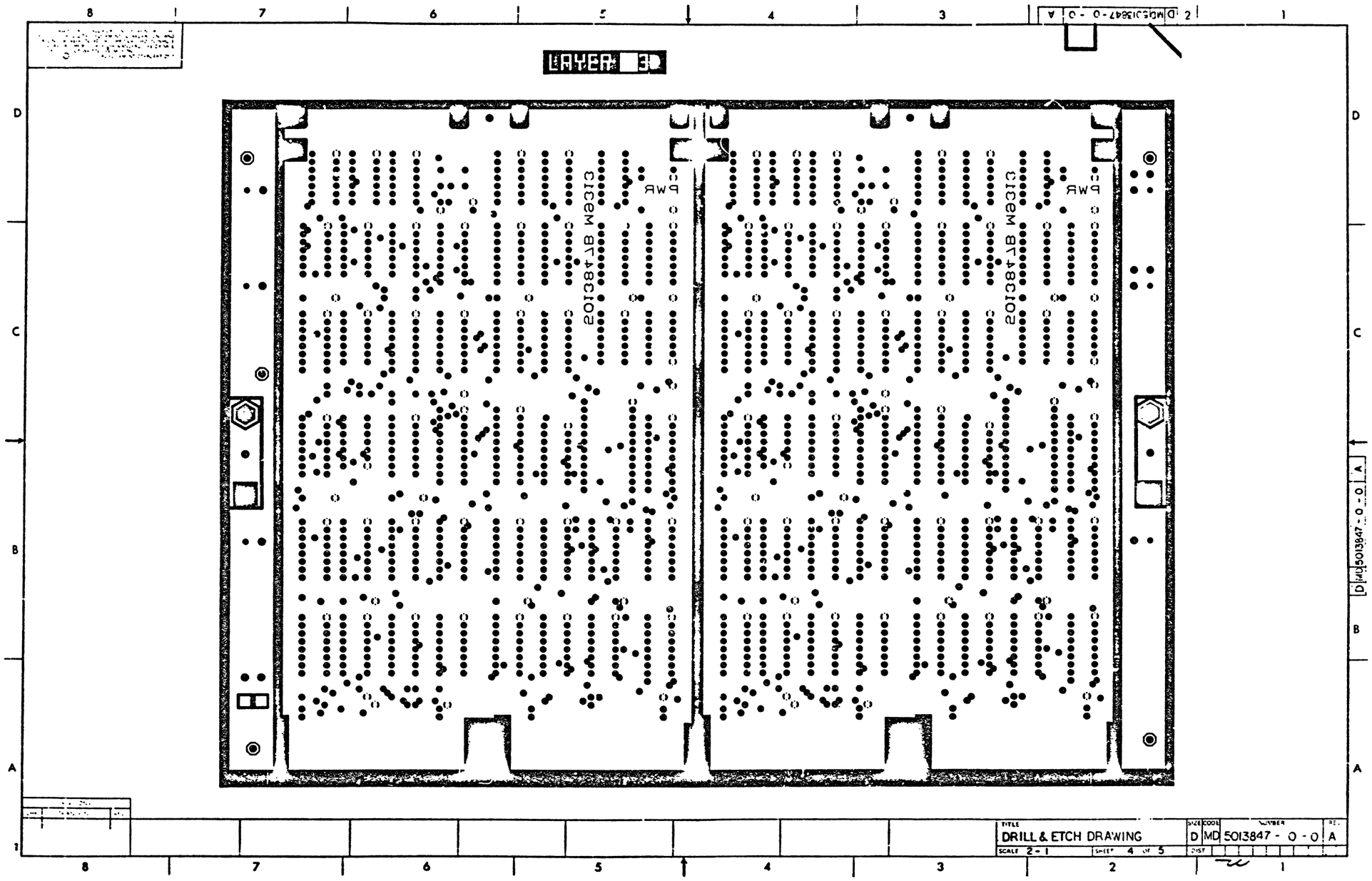
5013847B M9313

GND

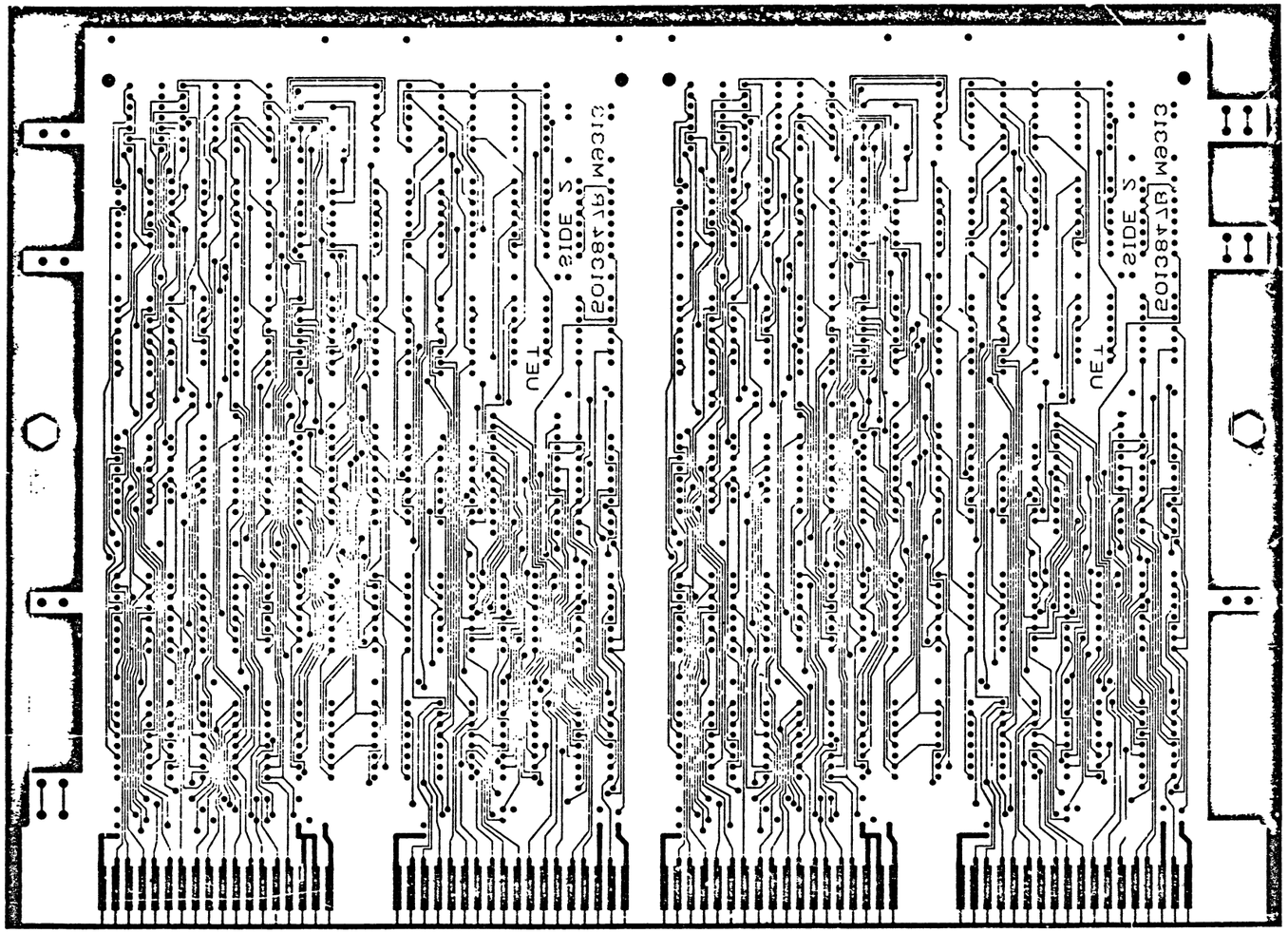
GND

D|MD|5013847 - 0 - 0|A

TITLE	SIZE	CODE	NUMBER	REV.
DRILL & ETCH DRAWING	D	MD	5013847 - 0 - 0	A
SCALE 2 - 1	SHEET 3 OF 5			

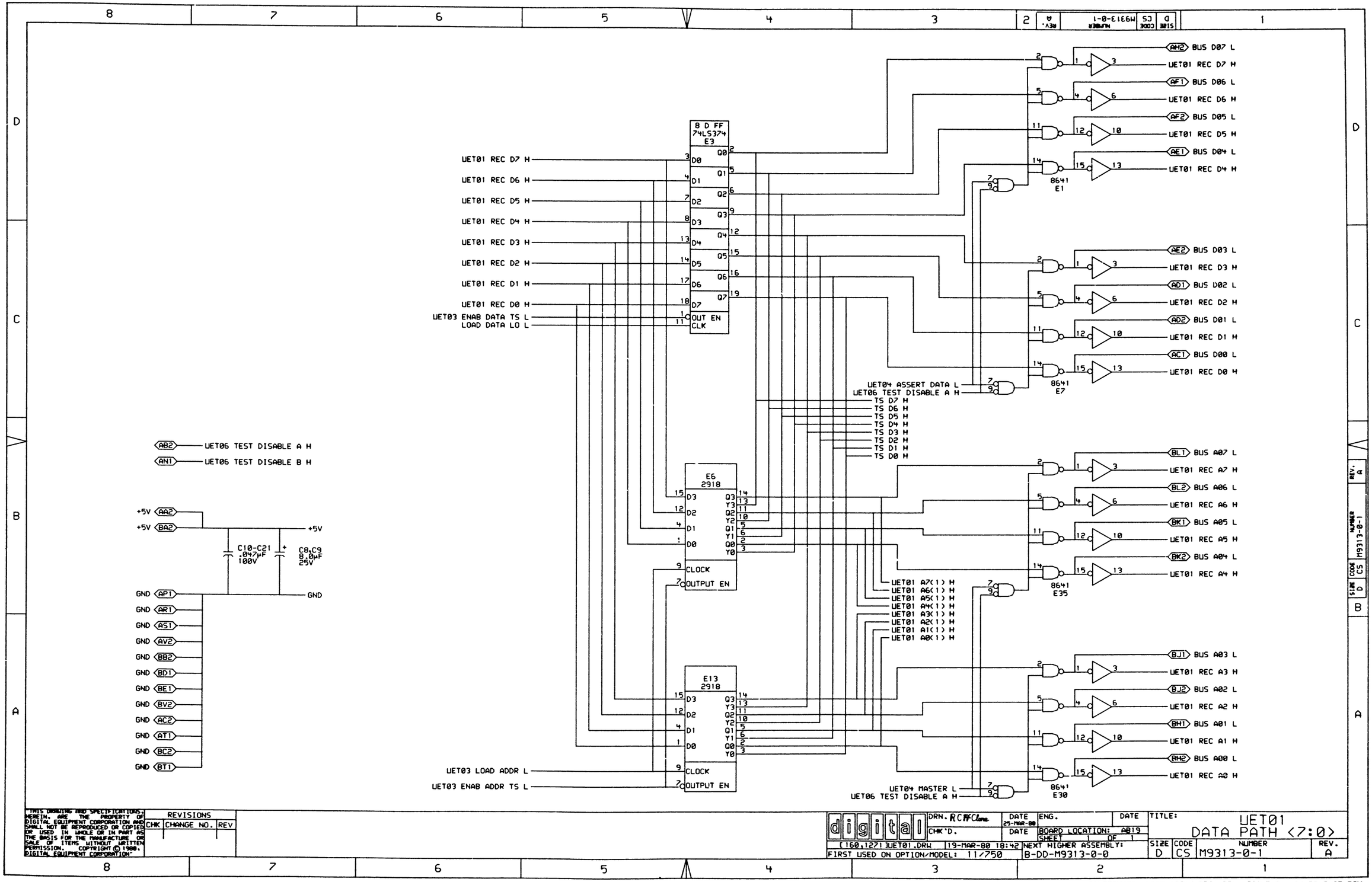

LAYER # 3
D
C
B
A
8
7
6
5
4
3
2
1
DRILL & ETCH DRAWING
SIZE D
CODE MD
NUMBER 5013847 - 0 - 0
REV A
SCALE 2 - 1
SHEET 4 OF 5
DIST
MD5013847-0-0 A

LAYER 4



TITLE	SIZE	CODE	NUMBER	REV
DRILL & ETCH DRAWING	D	MD	5013847 - 0 - 0	A
SCALE 2 - 1	SHEET 5 OF 5			

DMD 5013847 - 0 - 0 A



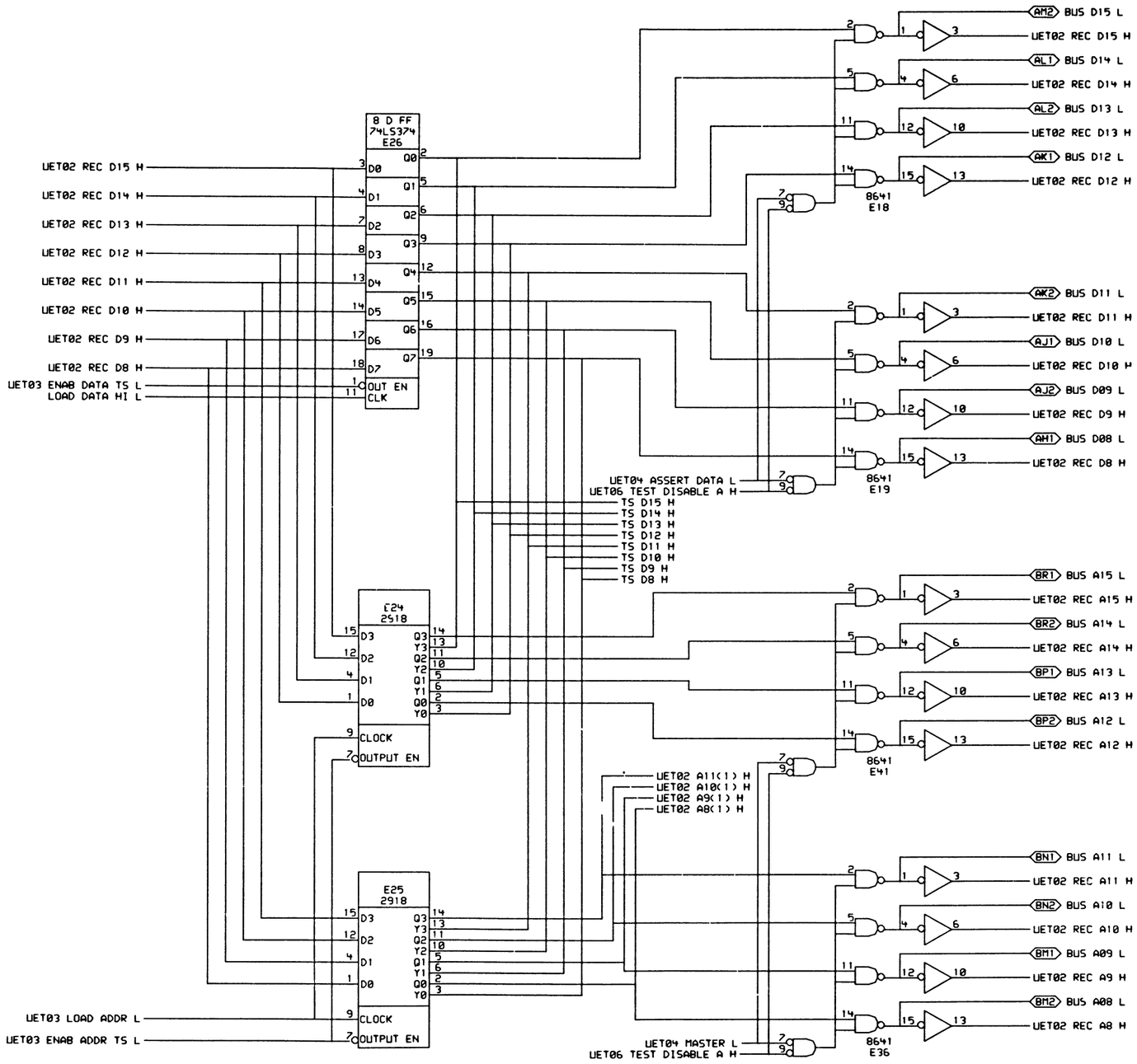
REVISIONS		
CHK	CHANGE NO.	REV

digital	DRN. RCM/Clare	DATE 25-MAR-80	ENG. / DATE
	CHK D.	DATE	BOARD LOCATION: AB19
			SHEET 1 OF 1
[160,127] UET01.DRW	19-MAR-80 18:42	NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL: 11/750		B-DD-M9313-0-0	

TITLE: UET01 DATA PATH <7:0>

SIZE	CODE	NUMBER	REV.
D	CS	M9313-0-1	A

COMETCHIPS, [160,127]UET01.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UET01.PLO[160,127] 25-MAR-80 17:08



REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. RCM/Clare 25-MAR-80 | ENG. | DATE | CHK'D. | DATE | BOARD LOCATION: A819 | SHEET 1 OF 1

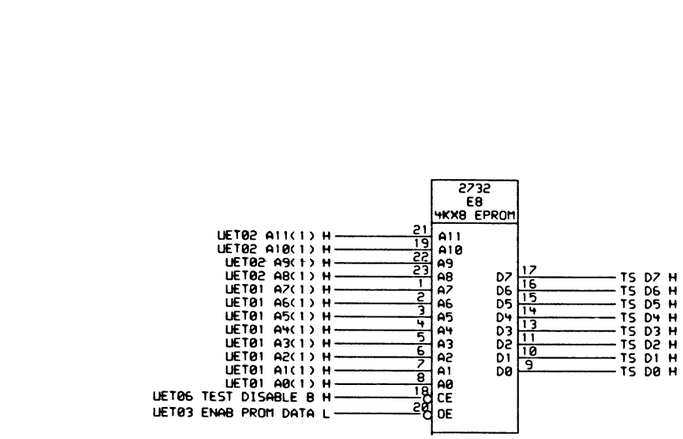
[150,1271]UET02.DRW 17-FEB-80 13:12 | NEXT HIGHER ASSEMBLY: B-DD-M9313-0-0

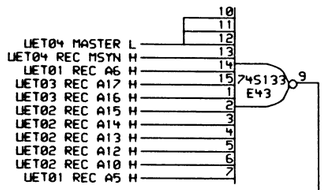
FIRST USED ON OPTION/MODEL: 11/750

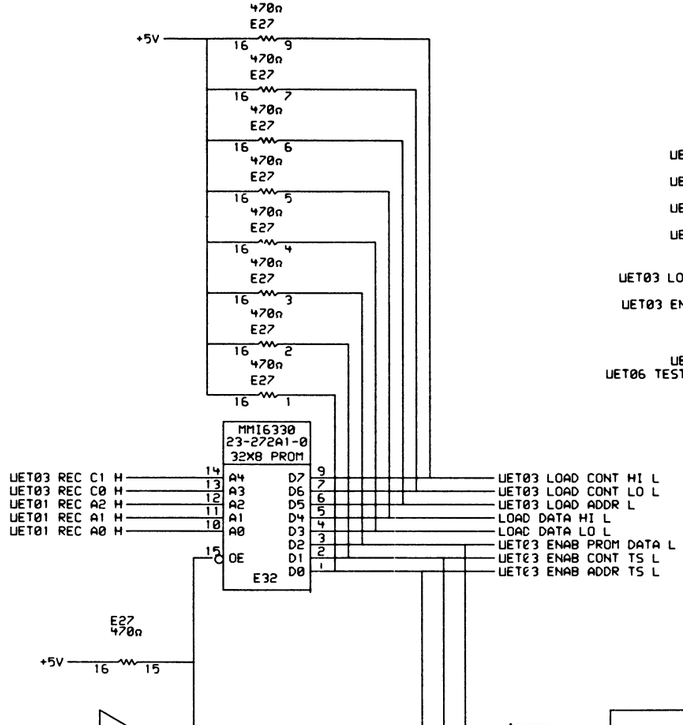
TITLE: UET02 DATA PATH <15:8>

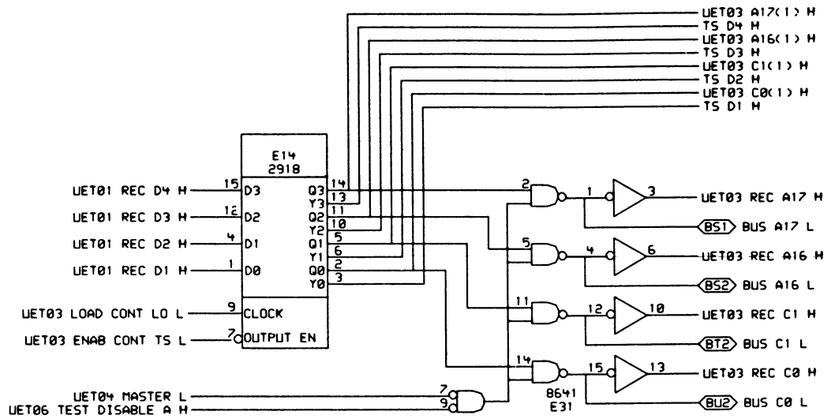
SIZE	CODE	NUMBER	REV.
D	CS	M9313-0-2	A

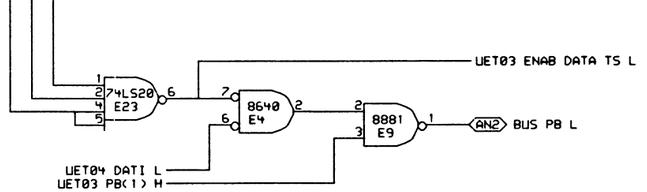
COMETCHIPS, [150,1271]UET02.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UET02.PLO[160,1271] 25-MAR-80 17:08

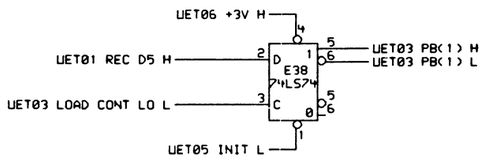


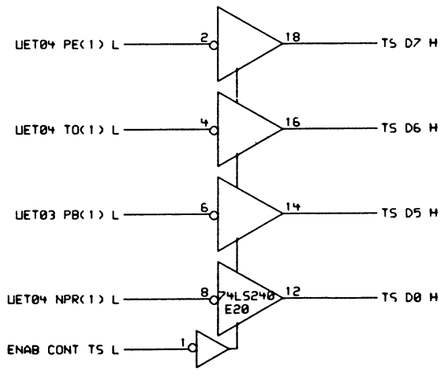












REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. RCM/CL DATE 21-MAR-80 ENG. DATE

CHK'D. DATE BOARD LOCATION: A819 SHEET 1 OF 1

[160,1271]UET03.DRW 19-MAR-80 18:50 NEXT HIGHER ASSEMBLY: B-DD-M9313-0-0

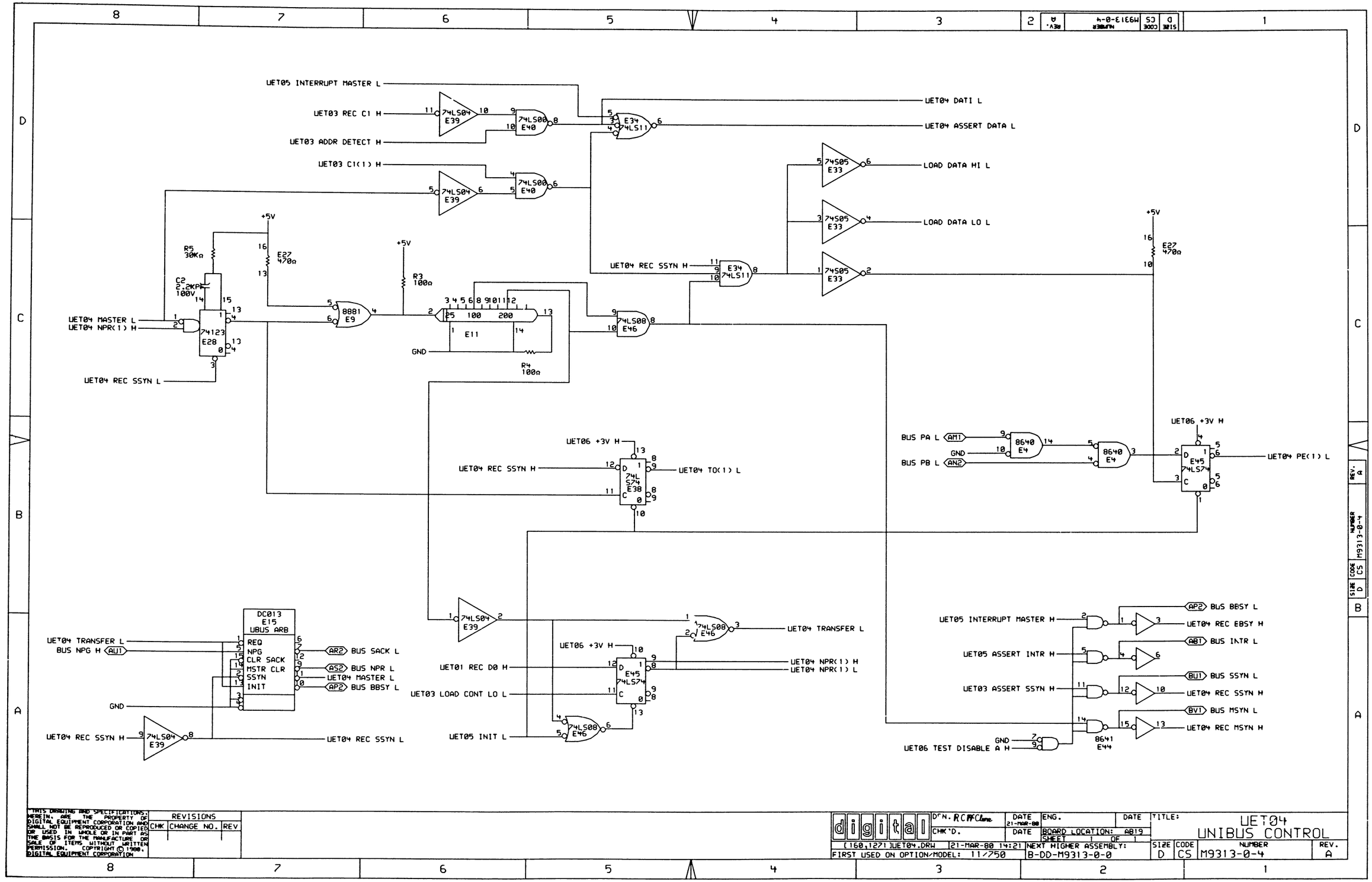
FIRST USED ON OPTION/MODEL: 11/750

TITLE: UET03 ADDRESS SELECTION

SIZE	CODE	NUMBER	REV.
D	CS	M9313-0-3	A

SIZE D | CODE CS | NUMBER M9313-0-3 | REV. A

COMETCHIPS, [160,1271]UET03.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UET03.PLO[160,1271] 25-MAR-80 17:07

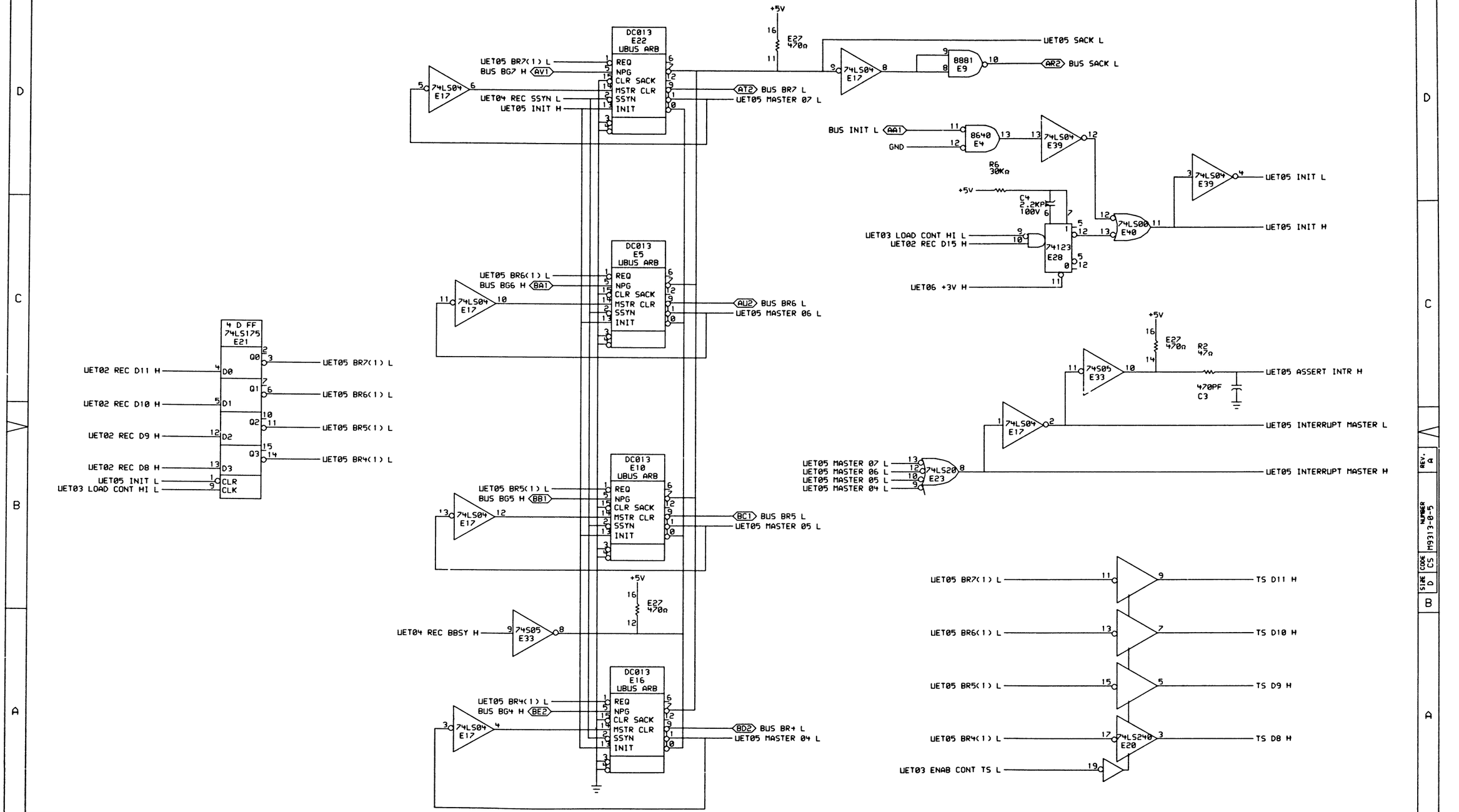


REVISIONS		
CHK	CHANGE NO.	REV

digital	DFN. RCMcClone	DATE 21-MAR-80	ENG.
	CHK'D.	DATE	BOARD LOCATION: AB19
			SHEET 1 OF 1
[160,1271]UET04.DRW	21-MAR-80 14:21	NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL: 11/750		B-DD-M9313-0-0	

TITLE: UET04 UNIBUS CONTROL			
SIZE	CODE	NUMBER	REV.
D	CS	M9313-0-4	A

COMETCHIPS, [160,1271]UET04.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UET04.PLO[160,1271] 25-MAR-80 17:08



REVISIONS		
CHK	CHANGE NO.	REV

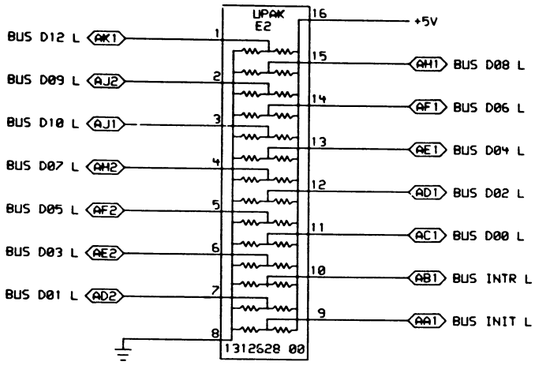
DRN. RCMcClane	DATE 25-MAR-80	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: A819	
		SHEET 1 OF 1	

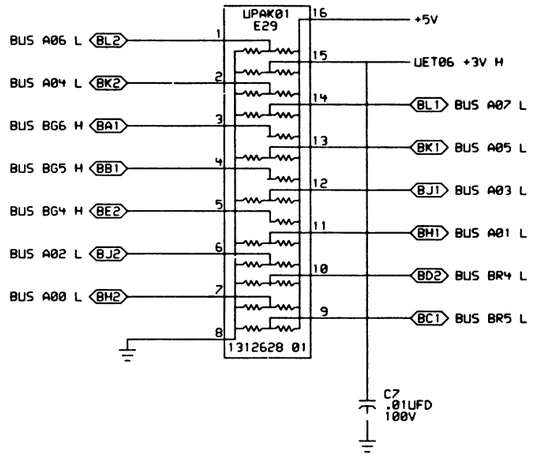
TITLE: UET05 INTERUPT CONTROL

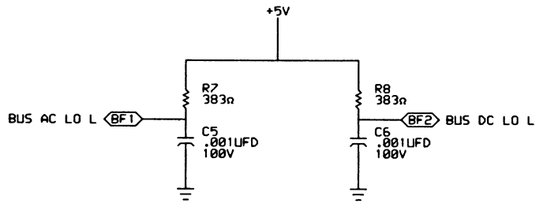
[160,1271]UET05.DRW 17-FEB-80 13:22 | NEXT HIGHER ASSEMBLY: B-DD-M9313-0-0 | FIRST USED ON OPTION/MODEL: 11/750

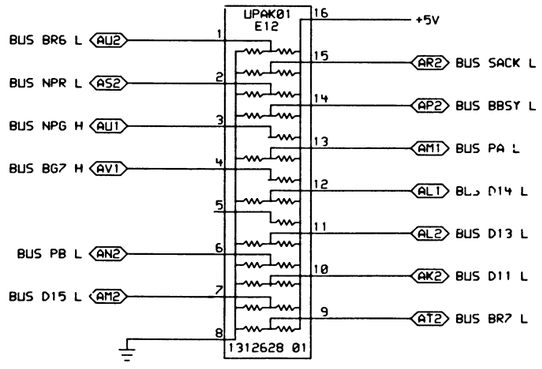
SIZE	CODE	NUMBER	REV.
D	CS	M9313-0-5	A

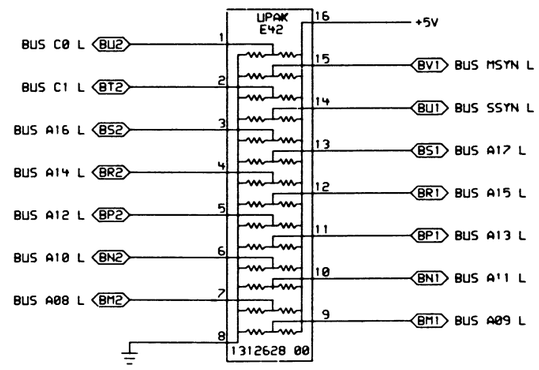
COMETCHIPS, [160,1271]UET05.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UET05.PLO[160,1271] 25-MAR-80 17:08











REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. RCM/Ume	DATE 25-MAR-80	ENG.	DATE
CHK'D.	DATE	BOARD LOCATION: AB19	
		SHEET 1 OF 1	
[160,1271]UET06.DRW	17-FEB-80 13:25	NEXT HIGHER ASSEMBLY:	
FIRST USED ON OPTION/MODEL: 11/750		B-DD-M9313-0-0	

TITLE: UET06
UNIBUS TERMINATION

SIZE	CODE	NUMBER	REV.
D	CS	M9313-0-6	A

COMETCHIPS, [160,1271]UET06.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UET06.PLO[160,1271] 25-MAR-80 17:08

SIGNAL NAME	PAGE NUMBER(S)
BUS A00 L	06,01
BUS A01 L	06,01
BUS A02 L	06,01
BUS A03 L	06,01
BUS A04 L	06,01
BUS A05 L	06,01
BUS A06 L	06,01
BUS A07 L	06,01
BUS A08 L	02,06
BUS A09 L	02,06
BUS A10 L	02,06
BUS A11 L	02,06
BUS A12 L	02,06
BUS A13 L	02,06
BUS A14 L	02,06
BUS A15 L	02,06
BUS A16 L	03,06
BUS A17 L	03,06
BUS AC LO L	06
BUS BBSY L	06,04
BUS BG4 H	05,06
BUS BG5 H	05,06
BUS BG6 H	05,06
BUS BG7 H	06,05
BUS BR4 L	05,06
BUS BR5 L	05,06
BUS BR6 L	05,06
BUS BR7 L	06,05
BUS C0 L	03,06
BUS C1 L	03,06
BUS D00 L	06,01
BUS D01 L	06,01
BUS D02 L	06,01
BUS D03 L	06,01
BUS D04 L	01,06
BUS D05 L	01,06
BUS D06 L	01,06
BUS D07 L	01,06
BUS D08 L	06,02
BUS D09 L	06,02
BUS D10 L	06,02
BUS D11 L	06,02
BUS D12 L	06,02
BUS D13 L	06,02
BUS D14 L	06,02
BUS D15 L	06,02
BUS DC LO L	06
BUS INIT L	06,05
BUS INTR L	06,04
BUS MSYN L	06,04

SIGNAL NAME	PAGE NUMBER(S)
BUS NPG H	06,04
BUS NPR L	06,04
BUS PA L	04,06
BUS PB L	04,03,06
BUS SACK L	05,06,04
BUS SSYN L	06,04
LOAD DATA HI L	02,03 04
LOAD DATA LO L	01,03,04
TS D0 H	01,03
TS D1 H	01,03
TS D10 H	02,05
TS D11 H	02,05
TS D12 H	02
TS D13 H	02
TS D14 H	02
TS D15 H	02
TS D2 H	01,03
TS D3 H	01,03
TS D4 H	01,03
TS D5 H	01,03
TS D6 H	01,03
TS D7 H	01,03
TS D8 H	02,05
TS D9 H	02,05
UET01 A0 (1)H	03,01
UET01 A1 (1)H	03,01
UET01 A2 (1)H	03,01
UET01 A3 (1)H	03,01
UET01 A4 (1)H	01,03
UET01 A5 (1)H	01,03
UET01 A6 (1)H	01,03
UET01 A7 (1)H	01,03
UET01 REC A0 H	01,03
UET01 REC A1 H	01,03
UET01 REC A2 H	01,03
UET01 REC A3 H	01,03
UET01 REC A4 H	01,03
UET01 REC A5 H	01,03
UET01 REC A6 H	01,03
UET01 REC A7 H	01,03
UET01 REC D0 H	01,04
UET01 REC D1 H	01,03
UET01 REC D2 H	01,03
UET01 REC D3 H	01,03
UET01 REC D4 H	01,03
UET01 REC D5 H	01,03
UET01 REC D6 H	01
UET01 REC D7 H	01
UET02 A10 (1)H	03,02
UET02 A11 (1)H	03,02

SIGNAL NAME	PAGE NUMBER(S)
UET02 A8 (1)H	03,02
UET02 A9 (1)H	03,02
UET02 REC A10 H	02,03
UET02 REC A11 H	02,03
UET02 REC A12 H	02,03
UET02 REC A13 H	02,03
UET02 REC A14 H	02,03
UET02 REC A15 H	02,03
UET02 REC A8 H	02,03
UET02 REC A9 H	02,03
UET02 REC D10 H	02,05
UET02 REC D11 H	02,05
UET02 REC D12 H	02
UET02 REC D13 H	02
UET02 REC D14 H	02
UET02 REC D15 H	02,05
UET02 REC D8 H	02,05
UET02 REC D9 H	02,05
UET03 A16 (1)H	03
UET03 A17 (1)H	03
UET03 ADDR DETECT H	03,04
UET03 ASSERT SSYN H	03,04
UET03 C0 (1)H	03
UET03 C1 (1)H	03,04
UET03 ENAB ADDR TS L	01,03,02
UET03 ENAB CONT TS L	03,05
UET03 ENAB DATA TS L	01,03,02
UET03 ENAB PROM DATA L	03
UET03 LOAD ADDR L	01,02,03
UET03 LOAD CONT HI L	05,03
UET03 LOAD CONT LO L	03,04
UET03 PB (0)H	03
UET03 PB (1)H	03
UET03 REC A16 H	03
UET03 REC A17 H	03
UET03 REC C0 H	03
UET03 REC C1 H	03,04
UET04 ASSERT DATA L	01,02,04
UET04 DATI L	03,04
UET04 MASTER L	04,01,03,02
UET04 NPR (0)H	03,04
UET04 NPR (1)H	04
UET04 PE (0)H	03,04
UET04 REC BBSY H	05,04
UET04 REC MSYN H	03,04
UET04 REC SSYN H	04
UET04 REC SSYN L	05,04
UET04 TO (0)H	03,04
UET04 TRANSFER L	04
UET05 ASSERT INTR H	05,04

NOTES:
1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS | CHK | CHANGE NO. | REV

digital | DRN. | DATE 25-MAR-80 | ENG. | DATE | CHK'D. | DATE | BOARD LOCATION: AB19 | SHEET 1 OF 1
[160,1271]UET07.DRW 17-FEB-80 13:28 | NEXT HIGHER ASSEMBLY: B-DD-M9313-0-0
FIRST USED ON OPTION/MODEL: 11/750

TITLE: UET07 FORWARD REFERENCE
SIZE D | CODE CS | NUMBER M9313-0-7 | REV. A

SIGNAL NAME	PAGE NUMBER(S)
UET05 BR4 (0)H	05
UET05 BR5 (0)H	05
UET05 BR6 (0)H	05
UET05 BR7 (0)H	05
UET05 INIT H	05
UET05 INIT L	05,03,04
UET05 INTERRUPT MASTER H	05,04
UET05 INTERRUPT MASTER L	05,04
UET05 MASTER 04 L	05
UET05 MASTER 05 L	05
UET05 MASTER 06 L	05
UET05 MASTER 07 L	05
UET05 SACK L	05
UET06 +3V H	06,05,03,04
UET06 TEST DISABLE A H	01,02,03,04
UET06 TEST DISABLE B H	03

SIGNAL NAME	PAGE NUMBER(S)

SIGNAL NAME	PAGE NUMBER(S)

NOTES:
1. THIS PAGE LISTS THE SCHEMATIC PAGE NUMBER(S) WHERE A SIGNAL NAME IS REFERENCED.

REVISIONS		
CHK	CHANGE NO.	REV

digital

DRN. DG — DATE 25-MAR-80 — ENG. — DATE — TITLE: UET08 FORWARD REFERENCE

CHK'D. — DATE — BOARD LOCATION: AB19 — SHEET 1 OF 1

[160,127]UET08.DRW — 17-FEB-80 13:30 — NEXT HIGHER ASSEMBLY: B-DD-M9313-0-0

FIRST USED ON OPTION/MODEL: 11/750

SIZE	CODE	NUMBER	REV.
D	CS	M9313-0-8	A

SIZE	CODE	NUMBER	REV.
D	CS	M9313-0-8	A

COMETCHIPS, [160,127]UET08.DPL, SCALE 2, "D" RELEASE BOX
COMETCHIPS UET08.PLO[160,127] 25-MAR-80 17:09

SIZE	CODE	NUMBER	REV.
B	DD	5413795-0	E

DRAWING NO.	NO. OF SHTS.	PART NO.	DESCRIPTION	REVISIONS
		5413795	PART MODULE	B C D D1
B-DD-5413795-0	1		11/750 CONTROL PANEL DRAWING DIR.	B C D E
E-UA-5413795-0-0	2		11/750 CONTROL PANEL UNIT ASSEMBLY	B C C C
K-PL-5413795-0-DBP	2		11/750 CONTROL PANEL PARTS LIST	B C D E
E-MD-5413794-0-0	3		11/750 CTRL PANEL DRILL & ETCH DWG	B B B B
		5013794	ETCHED BOARD	C C C C
K-PC-5413795-0-DBG			11/750 CTRL PANEL DESIGN DATA BASE	C C C C
E-EC-5413794-0-0	2		11/750 CTRL PANEL ETCH CUT DRAWING	B B C C
D-CS-5413795-0-1	1		11/750 CTRL PANEL CIRCUIT SCHEMATIC	B C C C

NOTES:

ALL DOCUMENTATION WAS RELEASED AT REVISION 'B'

REVISIONS	C	D	E
REV.	C	D	E
CHG NO.	TW001	TW002	TW003
DATE	9-80	11-81	5-83

digital

USED ON OPTION/MODEL	
11/750	

DRN.	J. CASEY	
CHK'D	J. CASEY	
ENG.	R. CIESLUK	
PROD.	J. CONSIDINE	

TITLE: 11/750 CONTROL PANEL

SIZE	CODE	NUMBER	REV.
B	DD	5413795-0	E

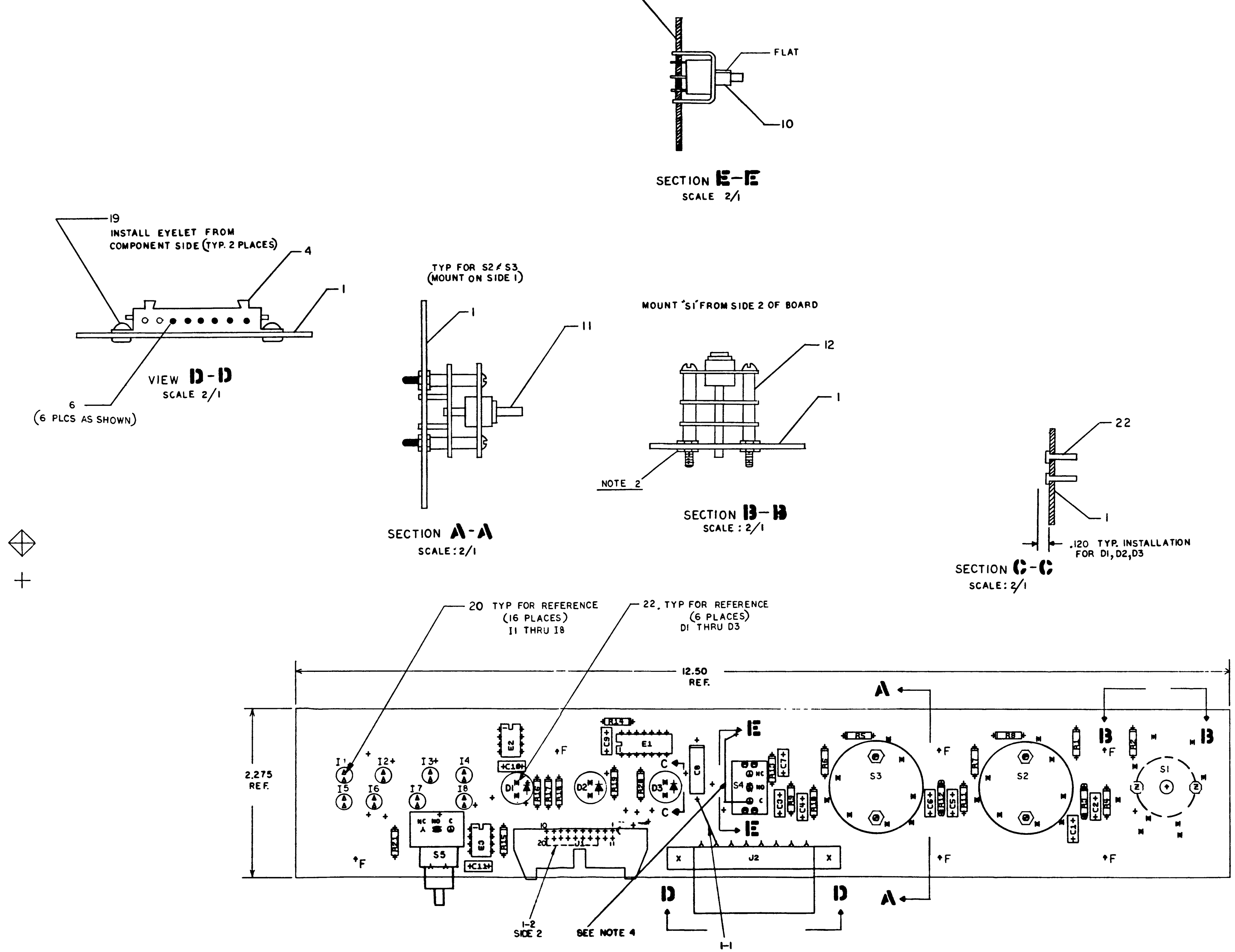
SHEET 1 OF 1

DRB 126

TW

ECO #1 REWORK INSTRUCTIONS
WIRE ADDS SIDE 1
1-1 ADD 18 AWG 9107560-03 WIRE AND TUBING 9107278-0C BETWEEN BOTTOM LEAD OF C8 AND J2-7.
WIRE ADDS SIDE 2
1-2 BETWEEN J1-13 AND J1-20

COMPONENT SIDE VIEW



NOTES:
4. ADD WIRE FROM LOWER PAD OF S4 TO FEED THRU ABOVE S4

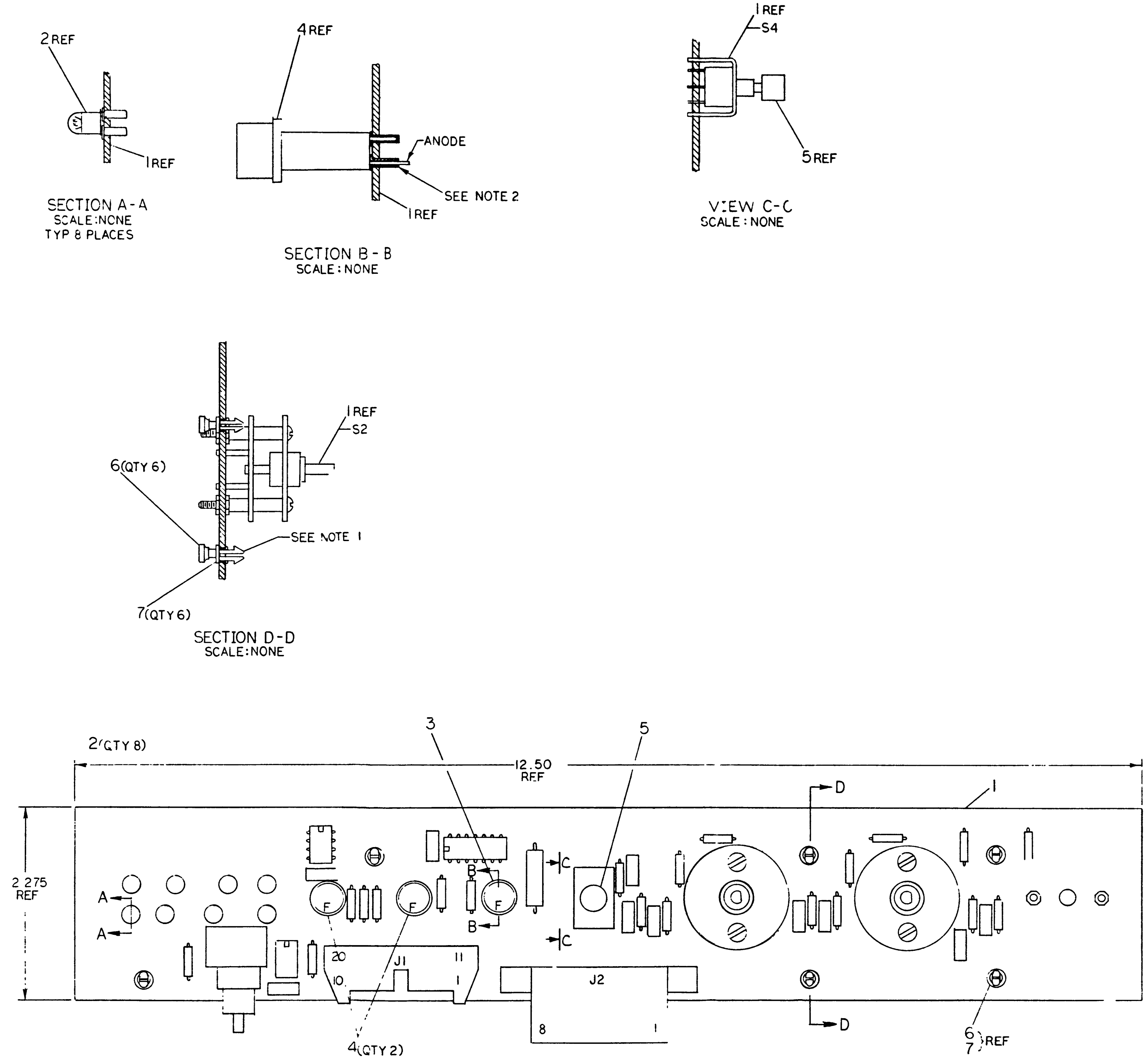
NOTES:
1. STEP/REPEAT 2 MLSS
2. S1, S2, S3 NUT AND WASHER ARE ASSEMBLED AS SHOWN WITH SWITCH.

digital
TITLE 11/750 CONTROL PANEL
NUMBER 5413795
ETCH REV. C

E UA 5413795 C

NOTES:

1. INSTALL PLUNGER(ITEM 6) AND GROMMET (ITEM 7) FROM SIDE 2 AS SHOWN. TYP. 6 PLACES.
2. PUNCH KNOCKOUT TIP OUT OF SOCKET A 3 LOCATIONS MARKED 'F' TO CLEAR ANODE AS SHOWN. USE AMP HAND TOOL #69729 WITH TIP #69728-3.



CAUTION OFF SHEET PARTS LIST
SEE K-PL-5413795-0-DBP

DESCRIPTION	DWG./PART NO	ITEM NO.

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

QUANTITY & VARIATION

THIRD ANGLE PROJECTION

REMOVE BURRS AND BREAK SHARP CORNERS

DO NOT SCALE DWG

DRN.	11-25-79	FIRST USED ON 11/750	digital
CHK'D	12/31/79	TITLE 11/750 CONTROL PANEL ASSY	
ENG.	3/21/80		
PROJ. ENG.	3/21/80		
PROD.			
NEXT HIGHER ASSY. E-AD-7016709-0-0			
MATERIAL SEE PARTS LIST	SCALE 1/1	SIZE E	CODE UA	NUMBER 5413795-0-0	REV. C
FINISH —	SHEET 2 OF 2	DIST			

TW

AUTOMATED BY PRTLST.4Q(50) — P A R T S L I S T — SHEET A1 OF A2

LINE	ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR
1	1	D-MD-5013794-0-0	5413795-00	11750 CONTROL PANEL	1	
2	2		1001610-00	.01 MFD 50V +80-20% Z5U CER	10	C1-C7,C9-C11
3	3	SEE NOTE	1012084-01	8 MFD 25V +75-10% AL EL	1	C8
4	4		1209340-00	MATE-N-LOK 08SKT(1X08). HSG	1	J2
5	5		1209456-01	MATE-N-LOK 01SKT 20-18AWG .087OD	6	
6	6		1209941-06	PCB,HEADER 20PIN(2X20).100CC 90D	1	J1
7	7		1211068-00	LAMP,T-1 5VDC,.115A	8	I1-I8
8	8		1212749-00	LIGHT,PNL INDICATOR,LED,RED	2	D2,D3
9	9		1212749-01	LIGHT,PNL INDICATOR,LED,GRN	1	D1
10	10		1216167-00	SW,PB 1PDT NO MOM-NC 0.4A	1	S4
11	11		1216181-00	SW,ROT 2P 4POS 110VAC/0.5A	2	S2,S3
12	12		1216182-00	SW,ROT 2P 5POS 28VDC/0.1A 1	1	S1
13	13		1300229-00	100.0 .25 W 5.0 % CF	6	R1,R2,R5-R8
14	14		1300295-00	330.0 .25 W 5.0 % CF	2	R19,R20
15	15		1300365-00	1.0 K .25 W 5.0 % CF	6	R13,R15-R18,R21
16	16		1303177-00	2.40 K .25 W 5.0 % CF	7	R3,R4,R9-R12,R14
17	17		1910011-00	DEC 7486 X-OR GATE-QUAD 2INPU	1	E1
18	18		1910406-00	75451 DRIVER,PERIPH,DUAL,	2	E2,E3
19	19		9000024-01	EYELET,ROLLED 0.121ODX0.192	2	
20	20		9007812-00	SKT,SPRING 01POS GOLD PC M	16	
21	21		1216523-00	SW,PB 1PDT NO MOM-NC 1A	1	S5
22	22		1211449-01	SKT,SPRING 01SKT TIN KNOC	6	
23	23		9009963-00	PLUNGER, 1/4 DIA	6	
24	24		9009966-00	GROMMET,SNAP-IN POLYCARBONAT	6	
25	25		1209941-04	PCB.HEADER LATCH	1	
26	26		1209941-03	PCB,HEADER LATCH	1	
27	27		1216524-00	CAP,PB SW WHITE	1	C12
28	28		9107560-03	WIRE,BUSS 18AWG TIN BARE	A/R	
29	29		9107278-00	TUBING,TEFLON .042ID	A/R	

REVISION HISTORY		
ENG	ECO NUMBER	REV
	INITIAL	B
RC	5413795-TW01A	C
RC	5413795-TW002	D
SB	5413795-TW003	E

BASIC PART NO: 5413795

SECTION A OF A

SECTION.VARIATION INDEX
[A] 00
[B]
[C]
[D]
[E]
[F]
[H]
[J]
[K]
[L]
[M]
[N]

DRN: P.TELLIER	DATE: 17-MAY-83	
CHK'D: F.GAROFALO	DATE: 17-MAY-83	
DES.ENG: R.CIESLUK	DATE: 17-MAY-83	
RESP.ENG.: D.CANE	DATE: 17-MAY-83	
MFG.ENG.: K.O'BRIEN	DATE: 17-MAY-83	
ASSEMBLY NUMBER: D-UA-5413795-0-0	TOP DOCUMENT NUMBER: B-DD-5413795-0-0	FILE NAME: Z1255E.PLS

D I G I T A L

TITLE: PARTS LIST

11/750 CONTROL PANEL

DOCUMENT NUMBER

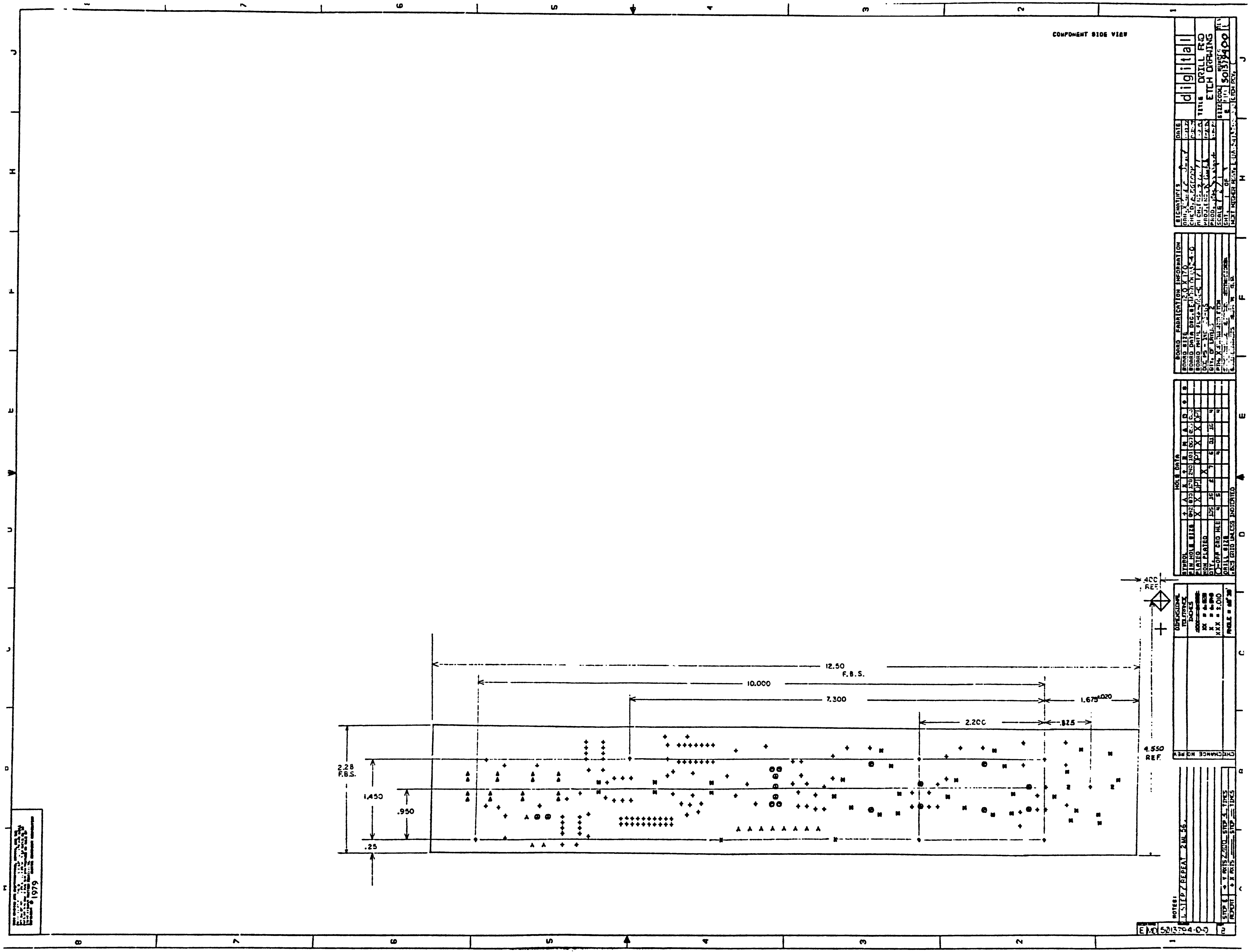
SIZE	CODE	NUMBER	REV
K	PL	5413795-0-DBP	E

EDIT # 24

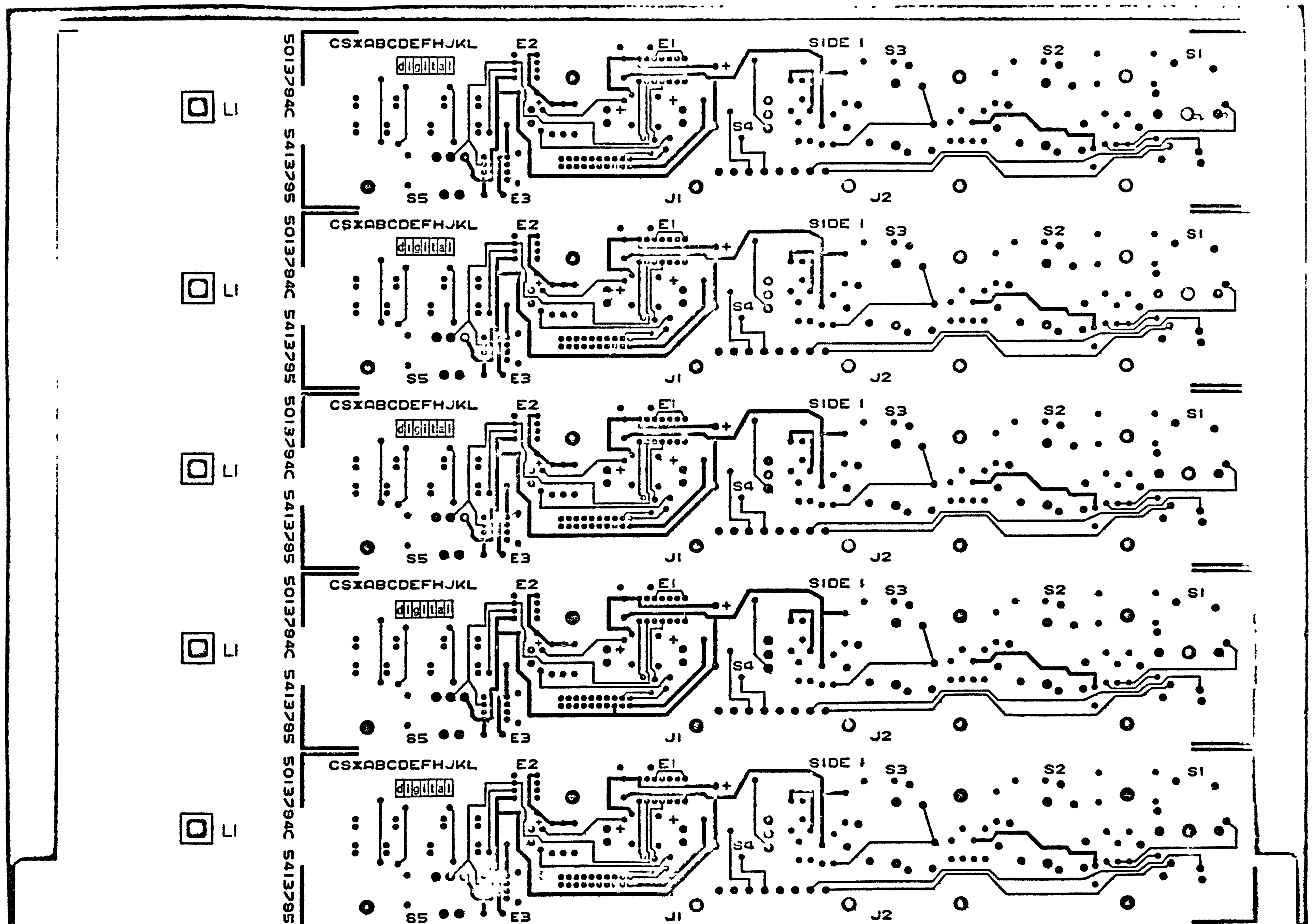
LINE ITEM	DOCUMENT NUMBER	PART NUMBER	DESCRIPTION	QTY PER VARIATION 00	REFERENCE DESIGNATOR

30 NOTE: SOME MODULES WILL HAVE 10-05306 INSTEAD OF 1012084-01

DIGITAL	TITLE	SECTION	SIZE	CODE	DOCUMENT NUMBER	REV
	11/750 CONTROL PANEL	A OF A	K	PL	5413795-0-DBP	E



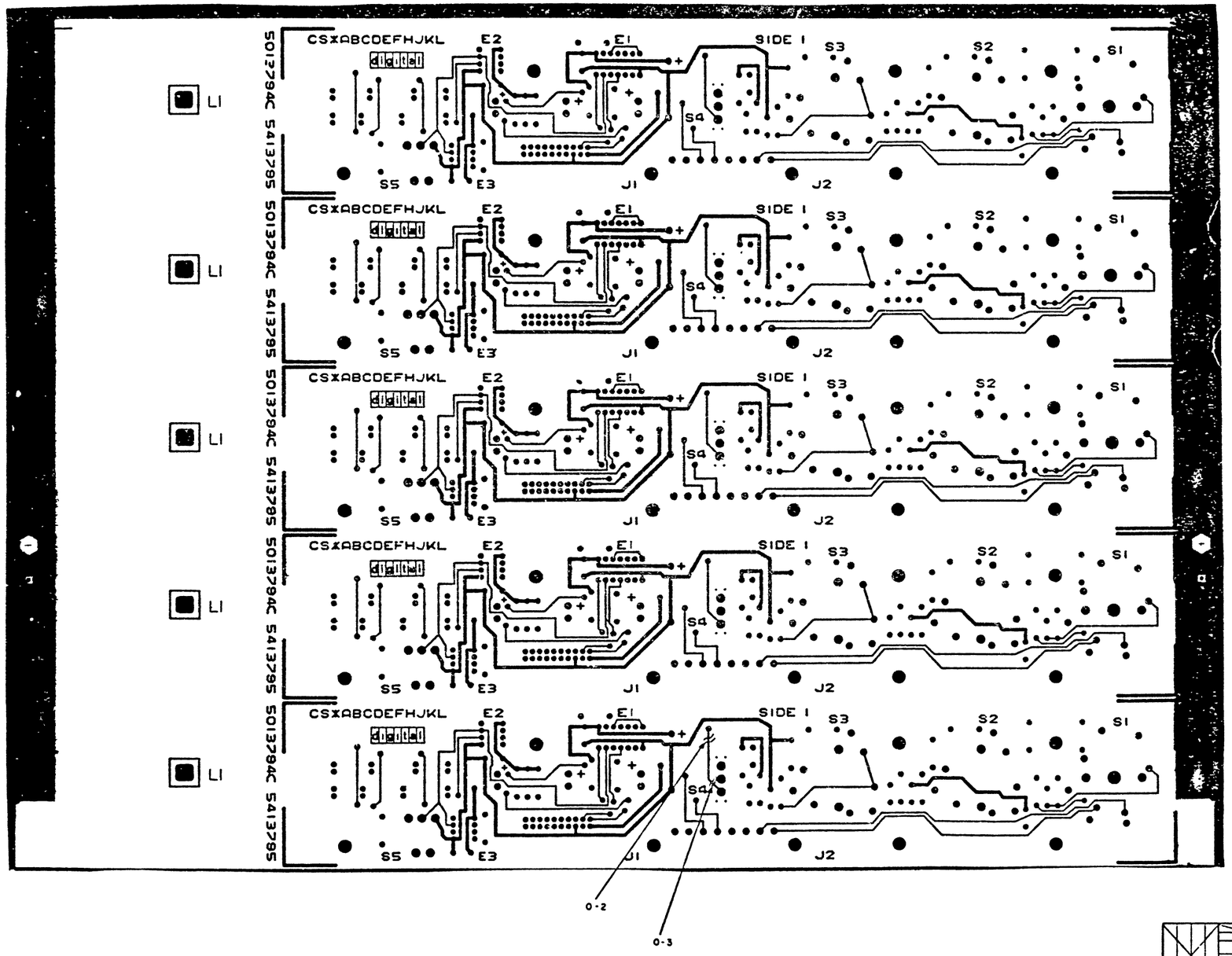
COMPONENT SIDE VIEW
12.50
F.B.S.
10.000
7.300
1.675±.020
2.200
.825
4.550
REF.
.400
REF.
2.28
F.B.S.
1.450
.950
.25
digital
DRILL RAD
ETCH DRAWING
5013704-0-0
NOTES:
1. STEP / REPEAT 2 ML 56.
1979



TITLE	SIZE	CODE	NUMBER	REV
DRILL & ETCH DRAWING	E	MQ	5013794-0-0	B
SCALE 2:1 SHEET 2 OF 3				

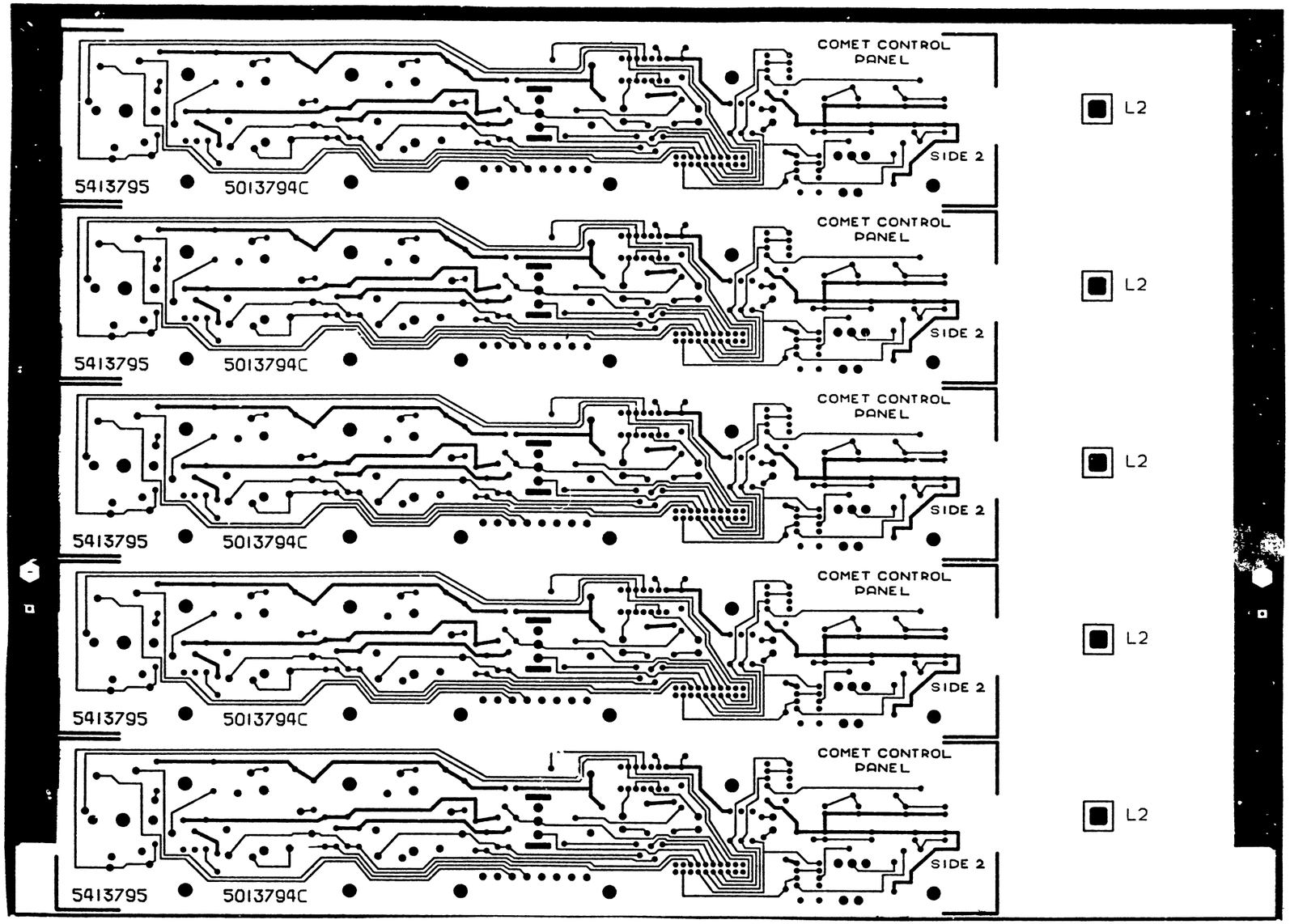
TITLE
DRILL & ETCH DRAWING

MD5013794-0-01B



ETCH CUT DRAWING

ECS813794-0-0 B



A

REVISIONS		
	CHANGE NO.	REV

8 7 6 5 4 3 2 1

TITLE ETCH OUT DRAWING

SCALE 2 1 0 2

ECI 5013794-0-01 B

REWORK INSTRUCTIONS
ETCH CUTS SIDE 1:
O-2 AT PTH ABOVE S1
O 3 AT LOWER PAD OF S4

REVISIONS		
DWG	CHANGE NO.	REV

TITLE: ETCH CUT DR-WING	SIZE: B	DWG NO: E.C. 5013794-0-1	REV: B
SCALE: 2 1 HALF 3 4			

8 7 6 5 4 3 2 1

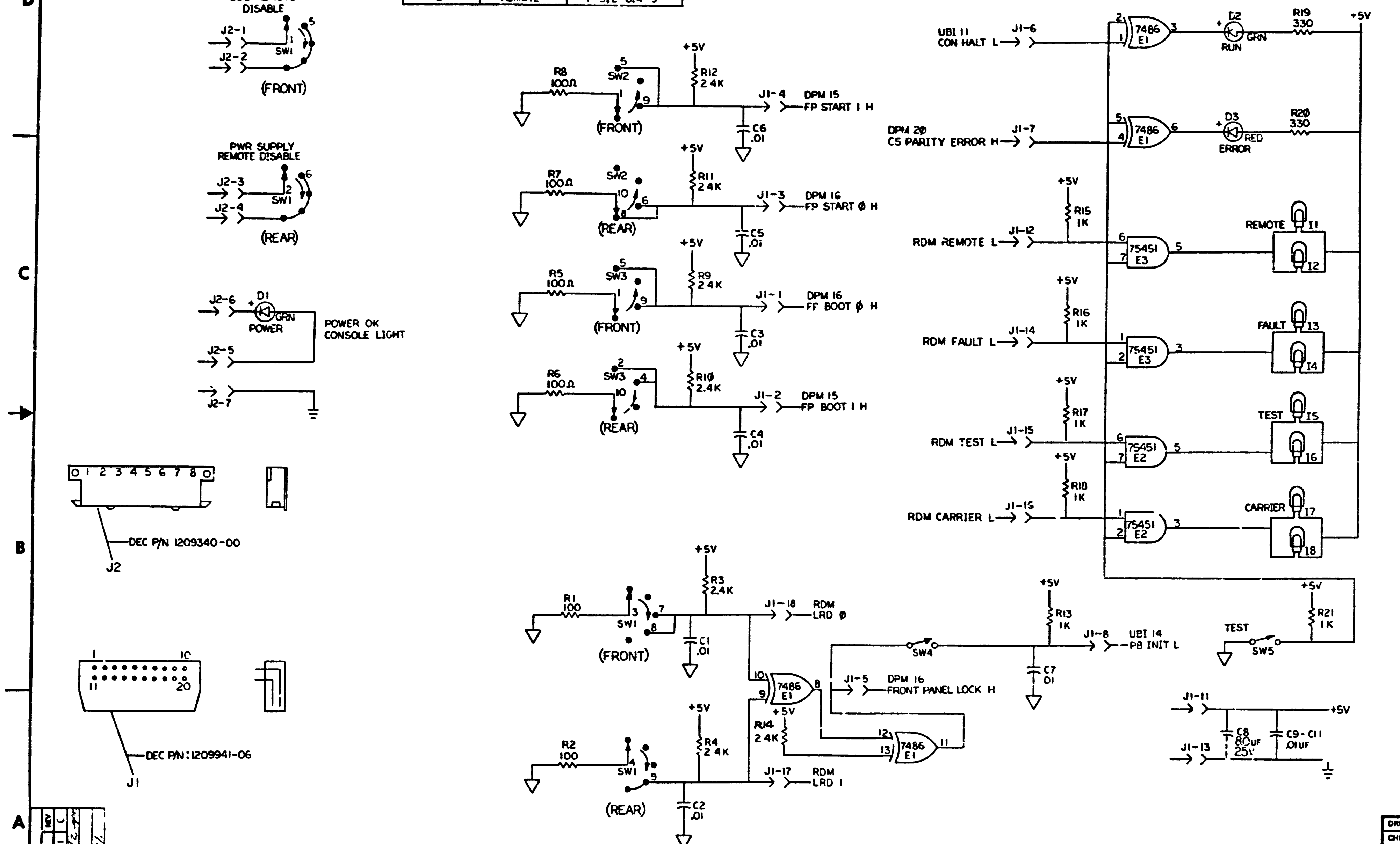
SWITCH 1 (SHOWN IN POSITION ONE)		
SWITCH POS	FUNCTION	CONNECTION
1	OFF	——
2	SECURE	1-5, 2-6
3	LOCAL	1-5, 2-6, 3-7
4	REMOTE SECURE	1-5, 2-6, 3-8, 4-9
5	REMOTE	1-5, 2-6, 4-9

SWITCH 2 (SHOWN IN POSITION ONE)		
SWITCH POS	FUNCTION	CONNECTION
1	BOOT	8-10
2	RESTART	1-9, 6-10
3	HALT	——
4	RESTART	1-5

SWITCH 3		
SWITCH POS	FUNCTION	CONNECTION
1	A	——
2	B	1-9
3	C	4-10
4	D	1-5, 2-10

NOTES:

1. SWITCHES 2 AND 3 ARE IN POSITION ONE WHEN FULLY CLOCKWISE.



DRN	[illegible]	30 July 79
CHK D		
ENG	[illegible]	8/21/80
PROJ ENG	D. [illegible]	[illegible]
P. [illegible]	[illegible]	[illegible]

NEXT HIGHER ASSY: B-DD-5413795-0-0

SCALE —— SHEET 1 OF 1

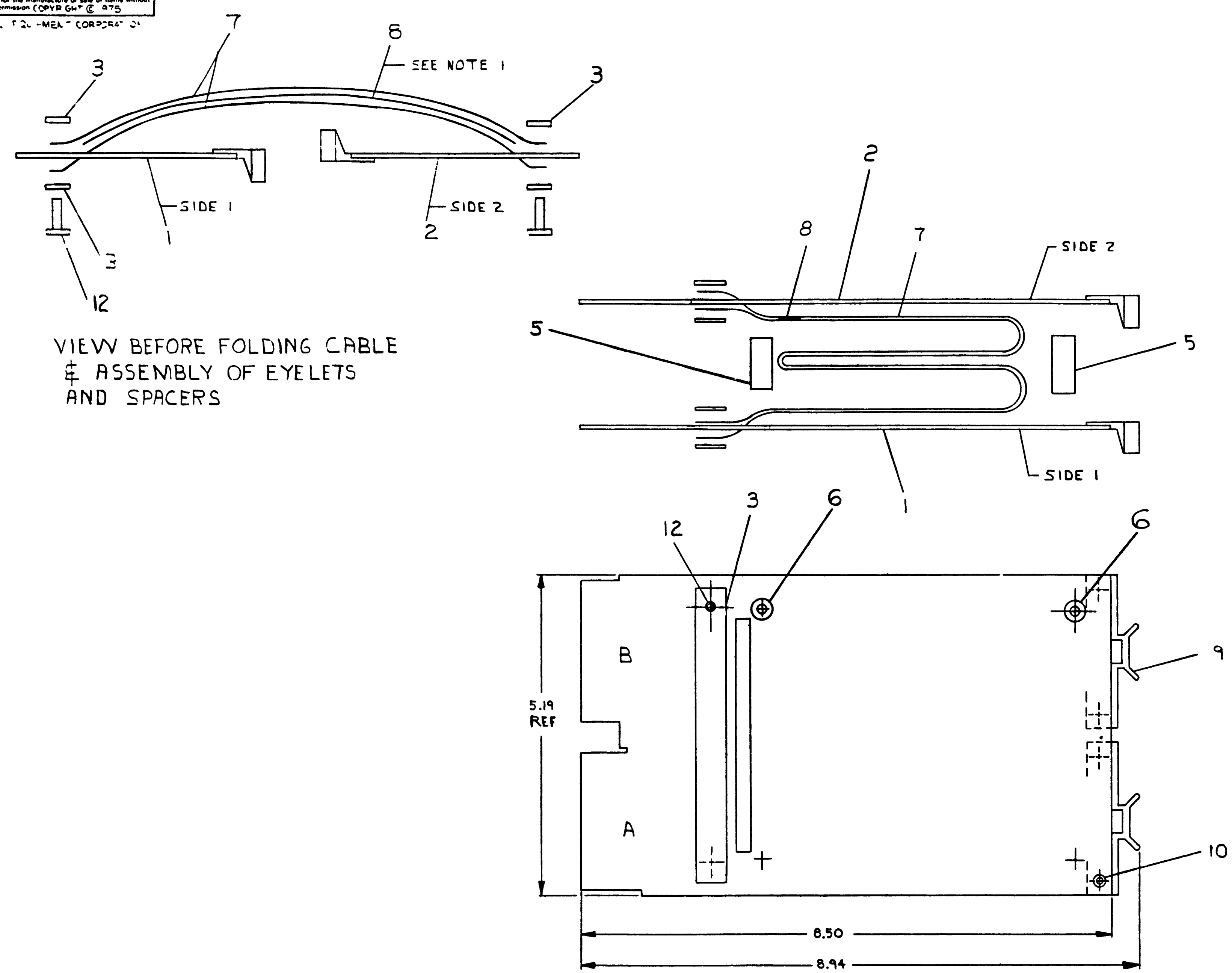
FIRST USED ON

digital

TITLE: 11/750 CONTROL PANEL

SIZE	CODE	NUMBER	REV
D	CS	5413795-0-1	C

DIST



NOTES:
1. FOAM (ITEM#8) TO BE PLACED BETWEEN CABLES (ITEM#7) AND ALL FOLDS.
2. FLEX PRINTS TO BE BOUND TOGETHER BY WRAPPING WITH BLACK ELECTRICAL TAPE (ITEM#4) EVERY 8 INCHES.

CAUTION: OFF SHEET PARTS LIST EXISTS SEE K-PL-M9202-0-DBP.

QTY	DESCRIPTION	PART NO	ITEM NO
4	EYELET	9006745	12
A/R	TAPE, ADHESIVE TRANSFER	9009347-01	11
8	EYELET	9006732	10
4	HANDLE, FLIP-CHIP MAGENTA	9008337-06	9
A/R	FOAM, GRAY	9008881	8
2	CABLE, FLEXPRINT (2' LG)	1700002-01	7
4	EYELET	9008223	6
4	SPACER	B-MD-7413488-0-0	5
A/R	BLACK ELECTRICAL TAPE	9009507	4
4	CLAMP, CABLE	B-MD-7413489-0-0	3
1	ETCHED CIRCUIT BOARD	D-CS-5411579-0-1	2
1	ETCHED CIRCUIT BOARD	D-CS-5411577-0-1	1

PARTS LIST

FIRST USED ON OPTION/MODEL	PDP/11
UNLESS OTHERWISE SPECIFIED DIMENSION IN INCHES TOLERANCES	DECIMALS XXX = .005, XX = .02, X = .1; ANGLES ±0° 30'
REMOVE BURRS AND BREAK SHARP CORNERS SURFACE QUALITY	✓
MATERIAL	SEE PARTS LIST
FINISH	—
DRN	D. Thellen — DATE 1/28/75
CHK'D	DATE 4-7-75
ENG	DATE 5-21-75
PROJ ENG	DATE 5-21-75
PROD	DATE 6-11-75
NEXT HIGHER ASSY	
SCALE	NONE
SHEET	1 OF 1

digital EQUIPMENT CORPORATION MAYNARD MASSACHUSETTS

TITLE: CABLE, UNIBUS (JUMPER)

SIZE	CODE	NUMBER	REV
D	UA	M9202-Ø-Ø	C

REVISIONS

REV	CHANGE NO	CHK
A	M9202-00001 K. SARGENT 15 April 77	
B	M9202 ...	
C	M9202-M1 ØØ3 F. CERAUSKIS 11 July 83	

DEC FORM NO DRO 100-A

DIGITAL EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

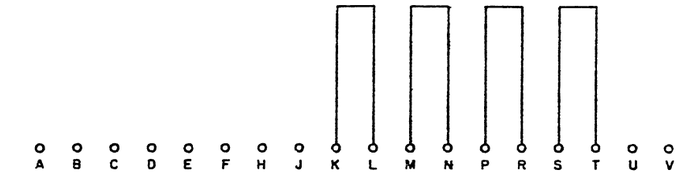
PARTS LIST

MADE BY	CHECKED	SECTION	M 685-2
DATE	DATE 1-16-69		
ENG R.E. Jansen	PROD R. Schuman	ISSUED SECT.	
DATE 1/28/70	DATE 2/17/70		

ITEM NO	DWG NO./PART NO. CL BASIC VAR.	DESCRIPTION	QTY/VAR				UNIT COST	UNIT QUANTITY	QUANTITY ISSUED
	B-CS-G727-0-1	CIRCUIT SCHEMATIC						1	
	C-AH-G727-0-5	ASSY/DRILLING HOLE LAYOUT						1	
	5008691	ETCHED CKT. BD.						1	

TITLE	ASSY NO.	SIZE	CODE	NUMBER	REV.	ECO NO
GRANT CONTINUITY	SHEET 1 OF 1	A	PL	G727 -0-0		
		DIST. 324 434 435				

REV	NUMBER	CODE	SIZE
	G727-0-1	CS	B



REVISIONS			
CHK	CHG NO	REV	

DRN	BUTLER	DATE 11-19-69
CHK'D		DATE 6-12-70
ENG		DATE 11-20-70
PROD		DATE

TRANSISTOR & DIODE CONVERSION CHART

DEC	EIA	DEC	EIA

digital
EQUIPMENT CORPORATION
MAYNARD, MASSACHUSETTS

TITLE: GRANT CONTINUITY G727

SIZE	CODE	NUMBER	REV
B	CS	G727-0-1	

PRINTED CIRCUIT REV A

DEC FORM NO
DRB 102

BLANK